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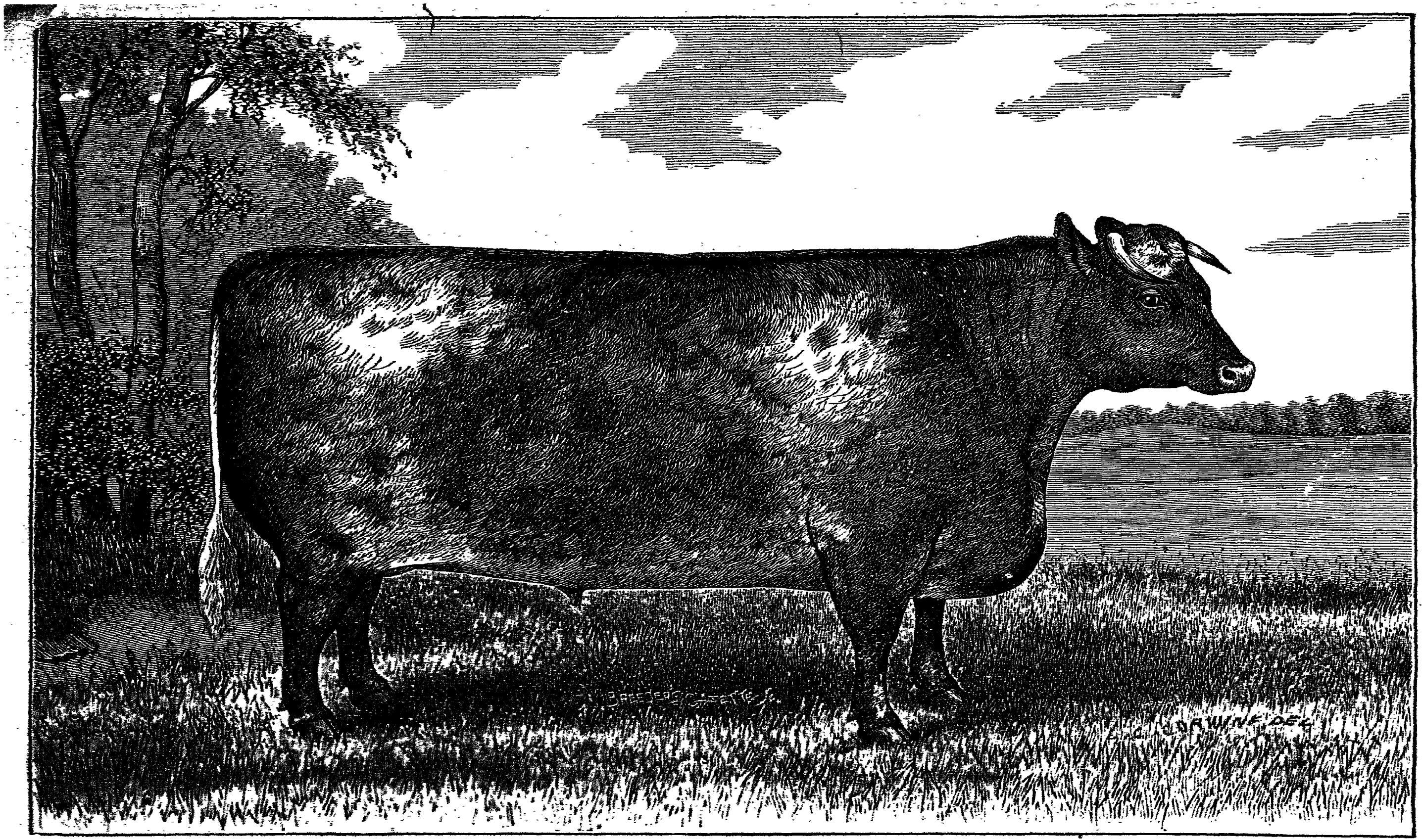
BREEDERS GAZETTE Sc.

Grade Short-Horn Steer, Charley Ross, exhibited by John Ross & Son, Bucyrus, O. Awarded Sweepstakes premium, American Fat-Stock Show, 1884.

TRANSACTIONS

OF THE

DEPARTMENT OF AGRICULTURE

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STATE OF ILLINOIS,

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WITH REPORTS FROM

COUNTY AGRICULTURAL BOARDS,

FOR THE YEAR 1884.

EDITED BY

S. D. FISHER, SECRETARY.

VOL. XXII, OLD SERIES. VOL. XIV, NEW SERIES.

Vols. 1, 2, KENNICOTT; 3, FRANCIS; 4, 5, 6, 7, 8, REYNOLDS;
9, 10, 11, 12, GARLAND; 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, FISHER.

SPRINGFIELD, ILL.:
H. W. ROKKER, STATE PRINTER AND BINDER.
1885.

LETTER OF TRANSMITTAL.

To His Excellency, Richard J. Oglesby *Governor of Illinois:*

Sir—I have the honor to transmit herewith the report of the State Board of Agriculture, for the year 1884.

Very respectfully,

S. D. Fisher, *Secretary.*

Springfield, June, 1885.

TWENTY-SECOND ANNUAL REPORT

OF THE

ILLINOIS STATE BOARD OF AGRICULTURE.

MEETINGS DURING THE FAIR.

SHERMAN HOUSE, CHICAGO,
SATURDAY, SEPTEMBER 6, 1884—8 o'clock P. M.

Board met in special session on call of the president.

Present: President Landrigan, Vice-Presidents Pearce, Conrad, Savage, Haskell, Dysart, Virgin, Rush, Funk, Chester, Skeavington, Gore, Pullen, Gillham and Washburn.

The President stated the object of the meeting to be the hearing of reports of Superintendents, as to the completeness of preparation in the several departments for the opening of the Fair.

Mr. Chester, Superintendent of Class F, Mechanics, reported an unusually large and creditable exhibit in his department, and that exhibitors have generally completed their arrangements.

Mr. Skeavington, Superintendent Class G, Farm Products, reported space in his department well filled with a very attractive show of grains, seeds, vegetables and dairy products.

Mr. Haskell, Superintendent Class H, Horticulture and Floriculture, reported that the show of fruits, flowers and pantry stores was the largest ever before exhibited at the State Fair, and that the quality of the articles was in keeping with the large number of entries.

Mr. Savage, Superintendent Class K, Textile Fabrics, reported space in his department well filled with a very attractive and valuable exhibit.

Mr. Conrad, Superintendent Class N, Agricultural Implements, reported that a number of new buildings had been constructed since the Fair of 1883 by exhibitors of farm machinery, and that all the buildings in the department were filled with attractive exhibits.

Mr. Washburn, Superintendent of Permit and Privilege Department, reported that the receipts for rent of booths, dining halls, etc., to date were more than double the amount received during the previous Fair, and that there were other applicants for valuable permits that would be granted.

Mr. Virgin, Superintendent of Stalls, reported a large increase in the number of applicants for horse stalls as compared with the preceding Fair, and that there were but few cattle stalls remaining unoccupied.

Mr. Pullen, Superintendent of the Purchasing Department, reported that all requisitions of superintendents for supplies had been filled.

Mr. Dysart, Superintendent of Gates and Tickets, reported that an ample supply of all kinds of tickets had been provided, and that everything in his department was in readiness for the opening of the Fair.

R. Ogden and Son, of Cameron, Ill., asked the privilege of showing in Lot 31, for Clydesdale and English draft breeds for imported or full blood horses in the breeding ring, the pure bred Clydesdale Stallion Marquis, and several of his grade colts.

Motion of Mr. Virgin carried, that only imported or full blood Clydesdale or English draft colts be permitted to show in the breeding rings as the get of stallions otherwise eligible to show in said rings.

The following communication was read:

CHICAGO, September 6, 1884.

S. D. FISHER, ESQ.,
Secretary Illinois State Fair:

DEAR SIR: On the basis of a resolution passed by your honorable body unanimously last year, permission was given us to make exhibits or practical tests of our Fire Extinguishers, on the inner circle of the race track of your State Fair Grounds.

We now have to request that you will extend the same courtesies to us during the continuance of your State Fair in Chicago this year, and would therefore petition your committee to grant us this privilege at your next meeting, to be held Monday, September 8th. Any explanation your committee my desire in relation to the manner of making these tests, or any other details connected with them, will be cheerfully given by one of our authorized agents, who will be subject to your call when your committee assembles.

We are, very respectfully, yours,
HARDEN HAND GRENADE FIRE EXTINGUISHER CO.
CHARLES H. ROYCE, *Secretary.*

Motion of Mr. Pearce adopted, that permission be granted the Harden Hand Grenade Fire Extinguisher Company to make an exhibit, on the same terms as at the previous Fair, viz: the furnishing at convenient points in the buildings on the Fair Grounds, without cost to the Board, a sufficient number of hand grenades to protec the buildings from fire.

Mr. Pearce called attention to the meeting in Chicago during the coming week of the officers of the fire departments of the cities of the West, and asked that the delegates in attendance be invited to the Fair in a body.

On motion of Mr. Gillham, Mr. Pearce was made a committee with power to invite and arrange for the reception of the officers of the fire departments at the Fair Grounds.

Motion of Mr. Gillham adopted, that a committee be appointed to confer with the city fire department and arrange for the use of a chemical engine and sufficient number of Babcock fire extinguishers.

President appointed as said committee Messrs. Gillham and Pearce.

The following telegram was read:

ST. PAUL, MINN., September 6, 1884.

Hon. John Landrigan, Chicago, Ill.:

Richball and Johnson are here and would come to Chicago. Do you want them?

FRANK H. DUNTON.

Motion of Mr. Virgin carried, that the President be authorized to reply that the Board had provided a liberal purse for pacing race, and that other races at this late date could not be advertised to advantage.

Mr. Gillham called attention to the importance of having the agricultural products of the State creditably represented at the World's Industrial and Cotton Centennial Exposition at New Orleans.

Motion of Mr. Haskell carried, that a committee be appointed to wait upon Mr. Gilbert, Illinois Commissioner for the New Orleans Exposition, and invite him to appear before the Board for the purpose of presenting the matter of making a State exhibit, the President to be chairman of the committee.

The President appointed as his associates on said committee Messrs. Haskell and Gillham.

On motion of Mr. Funk,

The Board adjourned subject to the call of the President.

SHERMAN HOUSE, CHICAGO,

MONDAY, SEPTEMBER 8, 1884—8 o'clock P. M.

Board met in special session on call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Conrad, Reynolds, Griffith, Haskell, Dysart, Lewis, Virgin, David, Judy, Funk, Chester, Gore, Gillham, Pullen and Washburn.

Motion of Mr. Pearce adopted, that the vote on the motion prohibiting grade colts from showing as the get of stallions in rings for recorded stock, be reconsidered.

Mr. Judy moved as a substitute for the pending motion, that either pure bred or grade colts be permitted to show as the get of stallions in pure bred rings. Adopted.

Motion of Mr. Conrad adopted, that bands at the head of processions entering the Fair Grounds, be admitted without charge.

Motion of Mr. Gillham adopted, that ten dollars be appropriated from the treasury for the payment of the membership fee of the Board in the organization known as the Inter-State Fair Association, and that the Secretary be instructed to forward the amount to the Treasurer of said Association.

Motion of Mr. Washburn adopted, that the Superintendent of Gates and Tickets be authorized to redeem the meal tickets presented by Mr. Brewer, the proprietor of the Club House, at 50 cents each.

Motion of Mr. Reynolds adopted, that a special meal ticket be prepared and issued to employés of the Board during the Fair at the Club House.

Motion of Mr. Gillham adopted, that the Superintendent of Tickets be and is hereby instructed to redeem meal tickets each night during the week of the Fair.

The following communication was read:

CHICAGO, ILL., September 8, 1884.

To the Honorable the State Board of Agriculture:

In the matter of Class M (Hippodrome Races), Miss Nellie Burke presents her claims of superiority to any party or parties engaged in the same business, having 16 horses, chariots, etc., etc.

We hereby agree to give two races each day, beginning with Wednesday, the 10th inst., and ending on Saturday, the 13th inst., for the sum of six hundred and fifty dollars.

AGENT NELLY BURKE.

On motion of Mr. Funk, the communication was referred to the Superintendent Classes B and M, with power to act.

On motion of Mr. Conrad, D. H. Hall, Secretary of the Chicago Driving Park, was granted permission to address the Board. Mr. Hall appeared before the Board and requested that the same privileges, in the way of admission tickets to the Fair Grounds, be granted members of the Chicago Driving Park, as at the Fair of 1883.

Motion of Mr. Judy adopted, that season tickets to the Fair of 1884 be issued to members of the Chicago Driving Park the same as in 1883, at $1 each.

Mr. David moved that the vote authorizing the issuance of special tickets at reduced rates to members of the Chicago Driving Park be reconsidered. Adopted.

The original motion coming up, was declared lost.

On motion of Mr. Lewis,

The Board adjourned subject to the call of the President.

SHERMAN HOUSE, CHICAGO,
TUESDAY, SEPTEMBER 9, 1884—8 o'clock P. M.

Board met in special session on call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Conrad, Savage, Reynolds, Griffith, Haskell, Lewis, Virgin, Vittum, Jr., David, Rush, Judy, Funk, Chester, Gore, Gillham, Pullen and Washburn.

Mr. Gillham, Superintendent of Grounds, called attention to the difficulty of procuring sufficient water for drinking purposes and for supplying the engines operated on the grounds.

On motion of Mr. Virgin, the matter was referred to a committee of three, with authority to take the necessary steps to procure an abundant supply of water.

President appointed as said committee, Messrs. Gillham, Pearce and Virgin.

Motion of Mr. Vittum carried, that Miss Nellie Burke be permitted to address the Board.

Miss Burke, upon being introduced, proposed, in consideration of the sum of $100, to make two Roman chariot races on the Fair Grounds on Thursday, with two chariots, each drawn by four horses.

Mr. Vittum moved to accept the proposition.

The ayes and nays being called for, the following vote was had:

Ayes—Messrs. Landrigan, Pearce, Conrad, Savage, Reynolds, Griffith, Haskell, Lewis, Virgin and Vittum.

Nays—Messrs. David, Rush, Judy, Funk, Chester, Gore, Gillham, and Washburn.

The motion was declared adopted.

On motion of Mr. Lewis, Robert Holloway, Esq., of Alexis, Ill., was granted permission to address the Board.

Mr. Holloway, on being introduced, stated that he desired to compete in the breeding ring for Clydesdale and English draft horses, and show the breeding qualities of a stallion (now dead) by exhibiting five of the stallion's colts. Mr Holloway stated that he had been led to believe that the Board would allow him to compete in this ring without the sire of the colts being present.

The following resolution, introduced by Mr. Reynolds, was adopted:

Resolved, That the Chairman of the Auditing committee and the Superintendent of Class B. be and they are hereby constituted a committee to whom shall be referred any claim which Mr. Holloway may present covering his expenses in bringing to the present fair, five colts under an alleged misunderstanding of the construction of the offer of prize No. 113, advertised in the premium list of the State Fair of 1884, and that said committee report the facts relating to this subject to the January, 1885, meeting of this Board.

Motion of Mr. Funk adopted, that the Illinois State Board of Agriculture issue a call for second annual meeting of the National Convention of Stockmen, to be held in Chicago on the 13th and 14th of November, during the week of the Chicago Fat-Stock Show.

Motion of Mr. Washburn adopted, that permission be granted the lessee of the club-house to sell beer in the basement of the club-house, provided that the lessee furnish the Board with meal tickets at the rate of three tickets for $1.

Mr. Lewis, Superintendent Class B, Horses, called attention to the case of an exhibitor in the speed ring, who had been unavoidably detained en route to the Fair by a railroad accident. The exhibitor claims that under the rules governing entries, that his entry could be made upon the certificate of the superintendent of the department. The rule reads "No entry can be made after Saturday, September 6, at 6 P. M., unless in case of unavoidable detention, and then only on the certificate of the superintendent of the department."

Motion of Mr. Pearce adopted, that the matter be referred to the President and Superintendent of Class B, Horses.

On motion of Mr. Judy,

The Board adjourned, subject to the call of the President.

SHERMAN HOUSE, CHICAGO,
WEDNESDAY, SEPTEMBER 10, 1884—8 o'clock P. M.

The Board met in special session, on call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Conrad, Reynolds, Griffith, Dysart, Haskell, Lewis, Virgin, Vittum, Rush, Skeavington, and Gillham.

Mr. Lewis, Superintendent of Class B, Horses, asked for information as to the extent of his authority in connection with the show of the American Clydesdale, held in connection with the Illinois State Fair.

Motion of Mr. Gillham adopted, that the Superintendent of Class B, Horses, be authorized to enforce the rules of the Board so far as applicable to the exhibition of the American Clydesdale Association, held in connection with the State Fair.

Motion of Mr. Virgin adopted, that parties making entries in the Speed class be furnished, without charge, season admission tickets good during the Fair.

On motion of Mr. Conrad,

The Board adjourned, subject to the call of the President.

SHERMAN HOUSE, CHICAGO,
THURSDAY, SEPTEMBER 11, 1884—8 o'clock P. M.

Board met in special session, on the call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Conrad, Reynolds, Griffith, Haskell, Dysart, Lewis, Virgin, Vittum, David, Rush, Funk, Chester, Skeavington, Gillham, Pullen, and Washburn.

Mr. Vittum called attention to the refusal of certain exhibitors in Class C to show sheep properly entered for special premiums.

Motion of Mr. Reynolds adopted, that the Superintendent of Class C, Sheep, be directed to fix an hour for judging the sheep in question, and that the parties making entries for the special premiums be notified of the time appointed; and in case of failure of the exhibitors to respond, that further report be made to the Board.

Mr. Haskell, chairman of the committee appointed to invite Hon. Frank Gilbert, State Commissioner for the World's Fair to be held at New Orleans, to meet with the Board, reported that Mr. Gilbert was present and desired to call attention to the importance of making a creditable exhibit of the products of the State at the New Orleans Exposition.

Mr. Gilbert was introduced and invited to address the Board.

Mr. Gilbert stated that the applications from this and other nations for space at the World's Industrial and Cotton Centennial Exposition at New Orleans had given the enterprise an international character, and the extent of the display would attract visitors from all countries, making it desirable and important that Illinois, the leading agricultural State, should be creditably represented in her natural products.

Mr. Gilbert was followed by Parker Earl, Superintendent of the Horticultural Department of the New Orleans Exposition; Dr. S. H. Peabody, Regent University of Illinois, and Hon. Lewis B. Hibbard, of the United States Commission of said Exposition.

Motion of Mr. Gillham adopted, that the consideration of the matter of aiding in making a State exhibit of agricultural products of the State at the New Orleans Exposition be made the special order for to-morrow evening at 8 o'clock.

Motion of Mr. Vittum adopted, that a committee be appointed to confer with the physicians attending the man injured on the Fair Grounds and ascertain the extent of the injury and expense for medical attendance.

President appointed Mr. Gillham as said committee.

Motion of Mr. Vittum adopted, that the Superintendent of the Speed Class be authorized to provide any additional attractions in place of the races, that did not fill the amounts for such new races, not to exceed the purses offered for the races originally provided for.

Mr. Lewis, Superintendent of the Speed Department, called attention to his ruling in admitting a horse to the 2:20 pacing race, that had not been entered until after 6 o'clock P. M. Saturday, September 6, 1884, the horse in question having been unavoidably delayed by a railroad accident while en route to the State Fair.

Motion of Mr. Vittum adopted, that the consideration of the matter be postponed until the next meeting of the Board.

Motion of Mr. Chester adopted, that the President appoint two members of the Board a committee to act with himself in preparing a call for the Second Annual meeting of the National Stockmen's Convention, the same to be held in Chicago during the week of the seventh Annual Fat-Stock Show.

The President appointed as his own associates on said committee Messrs. Chester and Skeavington.

On motion of Mr. Vittum,

The Board adjourned, subject to the call of the President.

Sherman House, Chicago,
Friday, September 12, 1884—8 o'clock P. M.

Board met in special session on call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Conrad, Reynolds, Griffith, Haskell, Dysart, Lewis, Virgin, Vittum, David, Judy, Chester, Skeavington, Gore, and Gillham.

The minutes of the called meetings of the Board held during the week of the Fair were read.

Motion of Mr. Reynolds adopted, that the minutes be approved.

The committee appointed to prepare a call for the Second Annual Meeting of the National Stockmen's Convention, submitted the following.

On motion of Mr. Gillham, the report of the committee was received and adopted:

To American Stockmen:

A convention of those interested in the breeding and management of the various classes of live stock in the United States will be held at Chicago, Thursday and Friday, Nov. 13 and 14, 1884, during the first week of the American Fat-Stock show. The attendance, character and results of the convention of like nature, held at Chicago at corresponding time last year, abundantly demonstrated the importance of such convention, and the especial fitness of the time and place as best meeting the convenience of the leading representatives of most classes of live-stock breeders.

The present condition of the live-stock interests, especially the official declaration that contagious disease has made its appearance among the cattle of the western States, is proof of the need of such a convention so held as to give the best opportunity for all classes interested to attend.

The Illinois State Board of Agriculture, therefore, issues this call and cordially invites the hearty co-operation of Agricultural and Live Stock Associations throughout the country, delegates from which are urged to attend and also all breeders, feeders and dealers of any class of live-stock in any part of the country.

Means for the prevention and extermination of contagious diseases and the legislation, National and State, affecting these objects, will be especially discussed, as well as the propriety of forming a permanent organization of the stock men of the country, which shall advance their common interest.

Motion of Mr. Chester adopted, that the Secretary have the call for the convention printed and widely distributed.

Motion of Mr. Gillham adopted, that the Superintendent of Class N, Agricultural Machinery, be permitted to make a display of engines and portable machinery and implements in front of the amphitheatre to-morrow, Saturday, September 13th, at 2 o'clock P. M.

The special order being the consideration of the matter of collecting a State exhibit of Agricultural products at the World's Industrial and Cotton Centennial Exposition at New Orleans, and coming up,

The following resolution introduced by Mr. Virgin was adopted:

Whereas, it is important that a creditable exhibition of the economic, natural and cultivated products and minerals of the State be made at the World's Industrial and Cotton Centennial Exposition at New Orleans, therefore be it

Resolved, That a committee of three be appointed by the President to prepare an address to the Agricultural Societies and citizens of the State, requesting contributions of non-perishable products for exhibition at the New Orleans Exposition.

Resolved, That the members of this Board be directed to heartily co-operate with Hon. Frank Gilbert, of Chicago, the United States, Commissioner for Illinois, in making a creditable State exhibit at the World's Industrial and Cotton Centennial Exposition, to be held at New Orleans December 1, 1884, to May 31, 1885.

President appointed as said committtee Messrs. Haskell, Pullen, and Chester.

The committee, after consultation, submitted the following draft of a circular.

On motion of Mr. Pearce, the address of the committee was approved.

To the Public:

The Illinois State Board of Agriculture at a recent meeting adopted the following resolutions:

WHEREAS, It is important that a creditable exhibition of the economic, natural and cultivated products and minerals of the State be made at the World's Industrial and Cotton Centennial Exposition at New Orleans, therefore be it

Resolved, That a committee of three be appointed by the President to prepare an address to the Agricultural Societies and citizens of the State, requesting contributions of non-perishable products for exhibition at the exposition at New Orleans.

Resolved, That the members of this Board be directed to heartily co-operate with Hon. Frank Gilbert, of Chicago, the United States Commissioner for Illinois, in making a creditable exhibit for the State at the World's Exposition at New Orleans, December 1, 1884, to May 31, 1885.

The Illinois State Board of Agriculture request the hearty co-operation of all interested in extending our commerce with Mexico, Central and South America, in making a creditable State exhibit of the natural and cultivated products and minerals at the World's Exposition at New Orleans. Mexico and other nations in Central and South America are making extensive preparations to show their resources to the best advantage at this exhibition, and the interest taken in this matter by these Governments ensures a large attendance of visitors therefrom.

It is important, for the extension of our trade, that a large and creditable exhibit be made at New Orleans, the commercial gateway to these countries, especially of the natural and cultivated products and articles of commerce that can be profitably grown or manufactured in this State and are required by the people of this continent.

All articles should be plainly marked, 1st, name of State. 2nd, name of article or variety. 3rd, contributor. 4th, producer. 5th, description or analysis. Pack carefully and ship to Hon. Frank Gilbert, U. S. Commissioner for Illinois, to the station on the Illinois Central railroad most convenient to the contributor. A letter of advice at time of shipment should be sent Hon. Frank Gilbert, at 85 Madison street, Chicago, giving a list of the articles sent

Farmers are especially requested to send small grain, thrashed and in the straw. Corn, in the ear and on the stalk. Grasses, wild and tame. Pull the grass up by the roots.

Any further information desired will be given by the Commissioner, or either member of the committee of the Illinois State Board of Agriculture.

GEO. S. HASKELL, Rockford, Ill.
E. E. CHESTER, Champaign, Ill.
B. PULLEN, Centralia, Ill.
Committee.

Motion of Mr. Gillham adopted, that Mr. Judy be added to the committee appointed to select judges for the Fat-Stock Show.

Motion of Mr. Virgin adopted, that the Superintendent of Grounds be authorized to dispose of the lumber owned by the Board on the Fair Grounds to the best advantage.

Minutes of the session read and on motion of Mr. Haskell adopted.

On motion of Mr. Gillham,
The Board adjourned subject to the call of the President.

JOHN LANDRIGAN,
President.

S. D. FISHER,
Secretary.

CONVENTION OF DELEGATES

FOR THE

ELECTION OF MEMBERS

OF THE

ILLINOIS STATE BOARD OF AGRICULTURE.

Fair Grounds, Chicago,
Wednesnay, Sept. 10, 1884—2 o'clock P. M.

The convention of delegates for the election of members of the State Board of Agriculture for the years 1885 and 1886, met at the President's office.

Hon. John Landrigan, President of the Illinois State Board of Agriculture, called the convention to order, and after stating the objects of the meeting, called for the nomination of a permanent chairman.

Hon. George S. Haskell, of Rockford, nominated Hon. Andrew Welch, of Yorkville, Kendall county, for permanent chairman.

There being no other nominations, Mr. Welch was elected chairman by acclamation.

Hon. D. B. Gillham, of Upper Alton, Madison county, nominated S. D. Fisher and Charles F. Mills, of Springfield, as Secretaries of the convention.

There being no other nominations, the parties were declared duly elected.

On motion of Hon. J. W. Judy, of Tallula, Menard county, D. B. Pittsford, Delavan, Tazewell county, was made Assistant Secretary.

The following section of the by-laws of the State Board of Agriculture, relating to the election of members of the Board, was read:

SECTION II.—ELECTIONS.

An election for a State Board of Agriculture, by a convention of delegates, shall be held upon the State Fair Grounds, at 2 o'clock P. M., on Wednesday of the State Fair in 1884, and biennially thereafter, at such place upon the Fair Grounds as the President may designate. Said delegates or alternates shall be chosen by the several agricultural societies, in counties where such societies exist, as follows: In counties having only one agricultural society, such society may appoint three delegates; in counties having two agricultural societies, each society may appoint one delegate, who shall be entitled to one and one-half votes; in counties having three agricultural societies, each society may appoint one delegate; and in case either society shall neglect or refuse to appoint such delegate, the delegate or delegates appointed shall be entitled to cast the full vote of the county; and in counties where no agricultural society exists, the delegates and alternates may be appointed by the Board of Supervisors or County Board, as the case may be; each county to be entitled to three votes, and no more, and each agricultural society shall be accredited to that county in which its Fair Grounds, or the greater part thereof, shall be located.

The delegates, alternates, or their written proxies, voting at the convention of delegates for the election of members of the State Board of Agriculture, shall, in all cases, be residents of the several counties covered by the organizations they respectively represent, and shall produce, at the time of election, the certificate of their appointment from the President or Secretary of their respective societies, or the proper county officer.

On or before 12 o'clock, noon, on Wednesday of the Annual Illinois State Fair for the year 1884, and biennially thereafter, each agricultural society shall report to the Secretary of the State Board of Agriculture, at the Fair Grounds, the names of the delegate or delegates from such agricultural society entitled to vote at the election for a State Board of Agriculture, and the Secretary shall prepare and report to the convention of delegates, immediately upon the organization of the same, and before any other business is done, the counties in which agricultural societies have been organized, and reported to him on or before the 1st day of September of that year; and also the names of the delegates reported to him as herein provided. The persons so appointed as delegates, alternates, or their proxies, and delegates and alternates appointed by boards of supervisors or county boards, as provided by law, or their proxies, and no others, shall be entitled to vote at any election for a State Board of Agriculture.

Voting for members of the State Board of Agriculture shall be *viva voce*.

The counties of the several congressional districts shall be called first, when vote is taken for member of said district, and then the remaining counties of the State in alphabetical order, unless otherwise determined by the convention, and a majority of all votes cast shall be necessary for an election.

The Secretary and Treasurer shall be chosen by the State Board of Agriculture at the first annual meeting in January after the election of the Board, and shall hold their offices for the same time as members of the Board, unless removed for good cause.

The members of the State Board of Agriculture shall enter upon the duties of their office on the second Tuesday in January succeeding their election, and shall hold their second annual meeting on the first Tuesday in January following.

The Secretary reported that the credentials of the following delegates had been filed in the office of the Secretary of the State Board of Agriculture:

COUNTIES.	DELEGATES.
Adams	Geo. W. Dean, Thos. Bates, C. S. Booth.
Boone	J. L. Whitbeck, C. B. Loop.
Brown	[illegible]. M. Vandeventer, Geo. W. Means, C. M. Dunlap.
Bureau	Simon Elliott, Joseph Morrison.
Carroll	W. A. J. Pierce, J. L. Reynolds, Dow R. Frazier.
Cass	Charles W. Savage, R. Lancaster.
Champaign	E. E. Chester, H. H. Harris.
Christian	Wm. T. Baker, John B. Ricks. James M. Simpson.
Clay	John R. Tanner, Adam Johnson.
Clinton	B. Pullen, W. H. Russell, M. J. O'Hornett.
Cook	Moses J. Wentworth.
DeKalb	Ed. Wait, Hiram Holcomb, Divine Dean.
Douglas	Wm. Howe, Charles Jones.
DuPage	W. M. Crampton, Daniel Kelley, H. L. Bush.
Edwards	J. W. Barber, M. S. Porter.
Fayette	Alfred Griffith, O. E. Lovett, Geo. D. Steinhauer.
Ford	James Arnold, W. A. Beckett, Columbus Jennings.
Franklin	F. L. Rea, James B. Hill, Wm. R. Webb.
Fulton	E. Vittum, D. H. Gorham.
Gallatin	M. M. Pool.
Greene	J. C. Burruss, E. A. Giller.
Grundy	J. H. Pattison, E. R. Dewey, Seneca Tupper.
Hamilton	J. R. Campbell.
Hancock	J. J. Johnson.
Hardin	L. F. Twitchell.
Henry	R. W. Fleming, David Hadley, C. C. Blish.
Iroquois	Conrad Secrest, John L. Hamilton.
Jasper	John M. Love.
Jefferson	Geo. M. Haynes, John C. McConnell, Geo. W. Evans.
Jersey	James V. Stryker, James S. Daniels, David E. Beaty.
JoDaviess	William Vincent, Robert Hawley.
Johnson	I. A. J. Parker, S. D. Poor, C. Cohn.
Kane	Wm. Pratt, H. H. Evans, James Herrington.

Delegates—Continued.

COUNTIES.	DELEGATES.
Kankakee	Milford Enyart, L. Small.
Kendall	N. Loucks, A. Welch, Chas. T. Cheny.
Knox	C. H. Higgins.
LaSalle	John Ferguson, Wm. Truman, Ransom Bullock.
Lawrence	James K. Dickerson.
Lee	Charles J. Rosbrook, James M. Richardson, Charles F. Ingalls.
Livingston	Jerry T. Bullard, Rufus C. Straight, Henry Skinner.
Logan	A. B. Nicholson, Sylvester Hoblit.
Macon	Milton Johnson, J. G. Willard, H. C. Allen.
Macoupin	D. Gore, John Tunnell, T. K. Gore.
Madison	D. B. Gillham, Louis Latzer, Hugh E. Bayle.
Marion	J. D. Telford.
Marshall	George G. McAdam.
Mason	H. A. Wright, J. F. Kelsey, S. A. Murdock.
McDonough	C. G. Chandler.
McHenry	L. W. Shedden, Fred Collison.
McLean	Peter Vance, D. G. Raymon.
Menard	Fred Wilkinson, Geo. B. Welsh,
Mercer	R. J. Cabeens, E. A. Crapnell.
Montgomery	Samuel R. Thomas.
Morgan	J. R. Megginson.
Ogle	Geo. W. Clark, J. L. Moore.
Peoria	John H. Hall, Burleigh Dunlap.
Piatt	H. R. Calef, W. H. Kratz, G. A. Burgess.
Pike	R. F. Frazier, James H. Crane, Wm. Pringle.
Pulaski	L. F. Crain, E. J. Ayers.
Putnam	John Swaney, A. W. Hopkins.
Richland	Isaac Welty.
Sangamon	A. M. Garland, G. A. Van Duyn, Geo. Pickrell.
Schuyler	Clarence Nell, James Lawler.
Scott	Charles S. Doyle. Geo. W. Martin.
Stark	J. M. Thomas, Henry Colwell.
St. Clair	M. T. Stookey, H. Padfield, Geo. H. Stookey.
Tazewell	D. B. Pittsford, B. Railsback, D. Sapp.
Union	Wm. Kratzinger, T. F. Bouton.
Vermilion	J. W. Newton.
Wabash	Leonard C. Bond.
Warren	D. C. Graham, S. C. Hogue, H. C. Giddings.
Wayne	Geo. W. Odell, John J. Funkhouser, Adam Johnson.
White	D. H. Graham, F. E. Pomeroy, Leonard Pyles.
Whiteside	Joseph B. Kearns, Robert McNeil, H. D. Burch.
Will	Chas. E. Kircheval, James A. Perry, W. S. Nelson.
Williamson	C. H. Denison, W. S. Washburn.
Winnebago	E. S. Bartholomew, Lawrence McDonald, Geo. S. Haskell.
Woodford	Thomas Cribben, P. S. Bassett.

Respectfully submitted,
S. D. FISHER,
Secretary.

Motion of C. B. Loop, Esq., Belvidere, Boone county, adopted, that the delegates reported by the Secretary be confirmed and allowed to participate in the proceedings of the convention.

L. Small, Esq., of Kankakee, introduced the following resolution, which was adopted:

Resolved, That where all the delegates from a county are not present, those in attendance be allowed to cast the full vote of the county, and that there be no changing of votes except on separate roll call.

Motion of Mr. Judy adopted, that the convention proceed to the election of President and Vice-Presidents.

Hon. D. B. Gillham, of Upper Alton, Madison county, nominated for President Hon. John Landrigan, of Albion, Edwards county.

There being no other nominations, Mr. Landrigan was declared elected President by acclamation.

Motion of Hon. Moses Wentworth, of Chicago, adopted, that the delegates from the several congressional districts, in their order, nominate candidates for members of the Board.

The delegates from Cook county nominated the following, who were unanimously elected members for their respective congressional districts:

First District—J. Irving Pearce, Chicago.

Second District—M. A. Morse, Chicago.

Third District—J. C. Vaughan, Chicago.

Fourth District—John P. Reynolds, Chicago.

Hon. Edward Waite, of Sycamore, DeKalb county, and Hon. John Griffith, of Batavia, Kane county, were nominated for the position of Vice-President for the Fifth Congressional District.

The call of the roll of delegates for the district resulted as follows: Mr. Griffith, Kane county, three; Mr. Waite, Boone county, three, DeKalb county, three—total, six. No delegates from Lake county, and the delegates from McHenry county not voting.

The call of the roll of counties resulted as follows: For Mr. Waite, Boone, 3; DeKalb, 3; DuPage, 1; Grundy, 3; Iroquois, 3; Kendall, 3; Montgomery, 1½; Piatt, 3; Stephenson, 1; Warren, 1½; White, 3; Winnebago, 1—total, 30.

Mr. Griffith: Adams, 3; Brown, 3; Carroll, 3; Cass, 3; Champaign, 3; Clay, 3; Clinton, 3; Cook, 3; Douglas, 3; DuPage, 2; Edwards, 3; Fayette, 3; Ford, 3; Franklin, 3; Fulton, 3; Gallatin, 3; Hardin, 3; Jasper, 3; Jefferson, 3; Jersey, 3; JoDaviess, 3; Johnson, 3; Kane, 3; Kankakee, 3; Knox, 3; LaSalle, 3; Livingston, 3; Logan, 3; Madison, 3; Marion, 3; Marshall, 3; Mason, 3; McDonough, 3; McHenry, 3; McLean, 3; Menard, 3; Mercer, 3; Montgomery, 1½; Morgan, 3; Ogle, 3; Peoria, 3; Pike, 3; Putnam, 3; Sangamon, 3; Scott, 3; Stark, 3; St. Clair, 3; Stephenson, 2; Tazewell, 3; Union, 3; Warren, 1½; Wayne, 3; Will, 3; Williamson, 3; Winnebago, 2; Woodford, 3—total, 136.

Mr. Griffith having received a majority of all votes cast was declared duly elected Vice-President for the Fifth Congressional District.

Hon. George S. Haskell, of Rockford, and Hon. Lawrence McDonald, of Winnebago county, were nominated for the position of Vice-President for the Sixth Congressional District.

The call of the roll of the delegates for the district resulted as follows: Mr. Haskell, Carroll county, three; JoDaviess county, three; Ogle county, three; Stephenson county, three; Winnebago county, three—total, 15.

The name of Hon. Lawrence McDonald was withdrawn, and upon motion Hon. George S. Haskell was unanimously elected Vice-President for the Sixth Congressional District.

Hon. Samuel Dysart, of Franklin Grove, Lee county, was nominated by Robert McNeil, Esq., of Whiteside county, as Vice-President for the Seventh Congressional District.

There being no other nominations Hon. Samuel Dysart was declared unanimously elected Vice-President for the Seventh Congressional District.

Hon. Edward C. Lewis, of Ottawa, LaSalle county, was nominated by William Truman, Esq., of LaSalle county, as Vice-President for the Eighth Congressional District.

There being no other nominations, Hon. Edward C. Lewis was declared unanimously elected Vice-President for the Eighth Congressional District.

Hon. John Virgin, of Fairbury, Livingston county, was nominated by Hon. Conrad Secrest, of Watseka, Iroquois county, as Vice-President for the Ninth Congressional District.

There being no other nominations, Hon. John Virgin was declared unanimously elected Vice-President for the Ninth Congressional District.

Hon. D. W. Vittum, Jr., of Canton, Fulton county, was nominated by J. M. Thomas, of Stark county as Vice-President for the Tenth Congressional District.

There being no other nominations, Hon. D. W. Vittum was declared unanimously elected Vice-President for the Tenth Congressional District.

Hon. E. B. David, of Aledo, Mercer county, was nominated by D. C. Graham, of Warren county, as Vice-President for the Eleventh Congressional District.

There being no other nominations, Hon. E. B. David was declared unanimously elected Vice-President for the Eleventh Congressional District.

Hon. Allan C. Rush, of Perry, Pike county, and Hon. David E. Beaty, of Jerseyville, Jersey county, were nominated for the office of Vice-President for the Twelfth Congressional District.

The call of the roll of the delegates in the counties composing the Twelfth Congressional District, resulted as follows: For Mr. Rush, Adams county, 3; Brown county, 3; Cass county, 3; Greene county, 1½; Pike county, 3; Scott county, 3—total 16½. For Mr. Beaty, Greene county, 1½; Jersey, 3—total 4½.

The name of Hon. D. E. Beaty was withdrawn, and there being no other nominations, Hon. Allan C. Rush was declared unanimously elected Vice-President for the Twelfth Congressional District.

Hon. J. W. Judy, of Tallula, Menard county, was nominated by Hon. J. B. Ricks, of Christian county, and Hon. E. A. Hall, of Springfield, Sangamon county, was nominated by D. Sapp, of Tazewell county, for the office of Vice-President for the Thirteenth Congressional District.

The call of the roll of delegates in the counties composing the Thirteenth Congressional District, resulted as follows: For Mr. Judy, Christian county, 3; Menard county, 3; Morgan county, 3; Tazewell county, 1½—total 10½. For Mr. Hall, Mason county, 3; Sangamon county, 3; Tazewell county, 1½—total, 7½.

The name of Mr. Hall was withdrawn, and there being no other nominations, Hon. J. W. Judy was declared unanimously elected Vice-President for the Thirteenth Congressional District.

Hon. LaFayette Funk, of Shirley, McLean county, was nominated by Hon. William Voorhies, Jr., of Piatt county, for the office of Vice-President for the Fourteenth Congressional District.

There being no other nominations, Hon. LaFayette Funk was declared unanimously elected Vice-President of the Fourteenth Congressional District.

Hon. E. E. Chester, of Champaign, Champaign county, was nominated by H. H. Harris, Esq., of Champaign, for the office of Vice-President for the Fifteenth Congressional District.

There being no other nominations, Hon. E. E. Chester was declared unanimously elected Vice-President for the Fifteenth Congressional District.

Hon. Joseph Skeavington, Albion, Edwards county, was nominated by Hon. John Landrigan, of Edwards county, for the office of Vice-President for the Sixteenth Congressional District.

There being no other nominations, Hon. Joseph Skeavington was declared unanimously elected Vice-President for the Sixteenth Congressional District.

Hon. David Gore, of Carlinville, Macoupin county, was nominated by Samuel R. Thomas, of Montgomery county, for the office of Vice-President for the Seventeenth Congressional District.

There being no other nominations, Hon. David Gore was declared unanimously elected Vice-President for the Seventeenth Congressional District.

Hon. D. B. Gillham, of Upper Alton, Madison county, was nominated by Hon. M. T. Stookey, of Belleville, St. Clair county, for the office of Vice-President for the Eighteenth Congressional District.

There being no other nominations, Hon. D. B. Gillham was declared unanimously elected Vice-President for the Eighteenth Congressional District.

Hon. B. Pullen, of Centralia, Marion county, was nominated by Geo. M. Haynes, of Jefferson county, and Hon. John H. Wilson of McLeansboro, Hamilton county, was nominated by J. R. Campbell, of McLeansboro, Hamilton county, for the office of Vice-President for the Nineteenth Congressional District.

The call of the roll of delegates in the counties composing the Nineteenth Congressional District resulted as follows: For Mr. Pullen, Clinton county, 3; Jefferson county, 3; Marion county, 3—total, 9. For Mr. Wilson, Franklin county, 3; Hamilton county, 3; White county, 3—total 9.

No vote from the counties of Gallatin, Hardin and Saline.

The name of Mr. Wilson, was withdrawn, and there being no other nominations, Hon. B. Pullen was declared unanimously elected Vice-President for the Nineteenth Congressional District.

Hon. J. M. Washburn, Carterville, Williamson county, was nominated by Hon. T. C. Bouton, of Jonesboro, Union county, for the office of Vice-President for the Twentieth Congressional District.

There being no other nominations, Hon. J. M. Washburn was declared unanimously elected Vice-President for the Twentieth Congressional District.

Motion of Mr. Judy adopted, that the Secretary officially notify the following gentlemen of their election as officers of the Illinois State Board of Agriculture, for 1885–86:

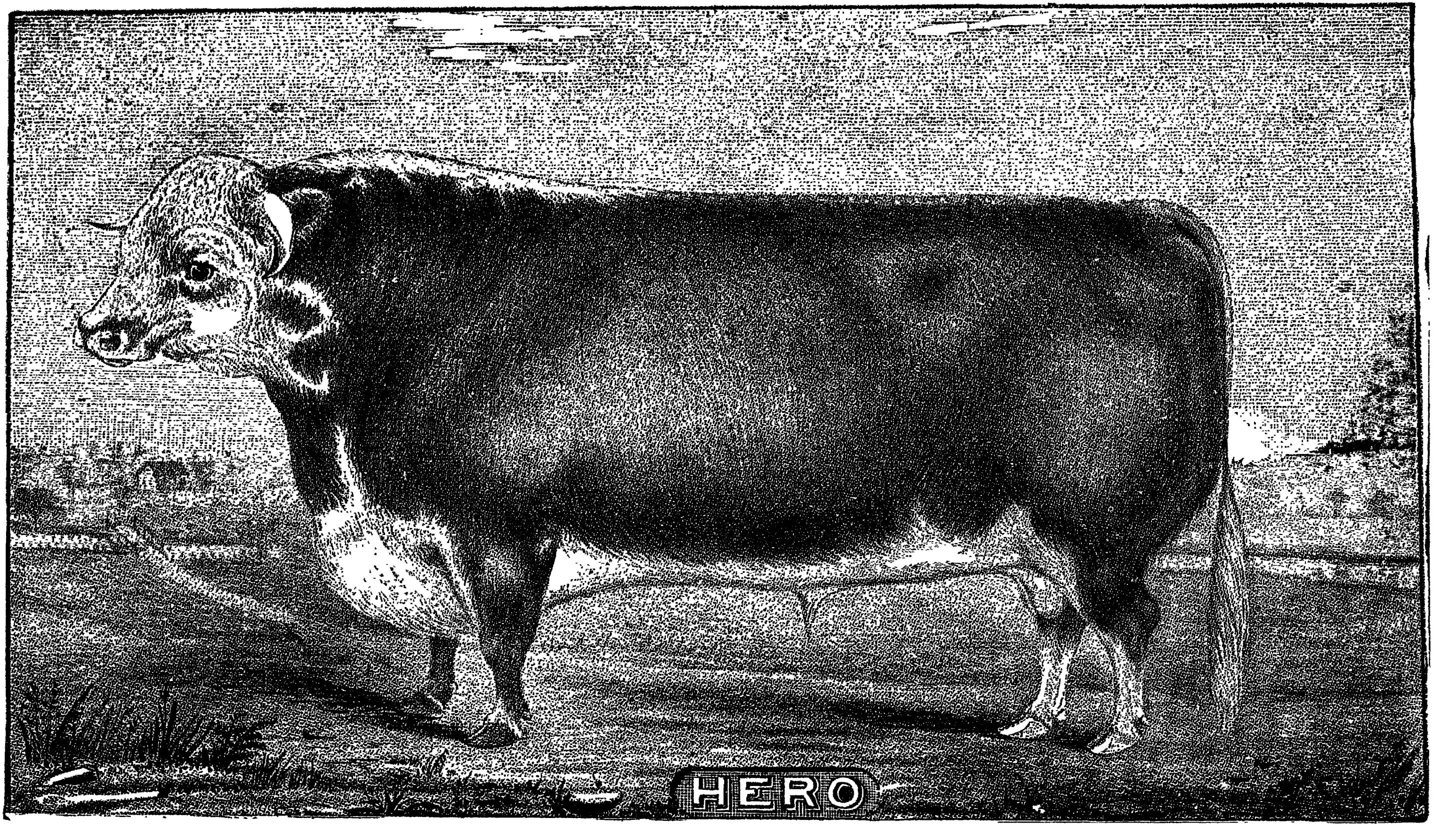
President, JOHN LANDRIGAN, Albion.

Vice Presidents.

1st Dist.—J. Irving Pearce, Chicago.
2d “ M. A. Morse, Chicago.
3d “ J. C. Vaughan, Chicago.
4th “ John P. Reynolds, Chicago.
5th “ John Griffith, Batavia.
6th “ George S. Haskell, Rockford.
7th “ Samuel Dysart, Franklin Grove.
8th “ E. C. Lewis, Ottawa.
9th “ John Virgin, Fairbury.
10th “ D. W. Vittum, Jr., Canton.
11th Dist.—E. B. David, Aledo.
12th “ Allan C. Rush, Perry.
13th “ J. W. Judy, Tallula.
14th “ LaFayette Funk, Shirley.
15th “ E. E. Chester, Champaign.
16th “ Joseph Skeavington, Albion.
17th “ David Gore, Carlinville.
18th “ D. B. Gillham, Upper Alton.
19th “ B. Pullen, Centralia.
20th “ J. M. Washburn, Carterville.

Motion of Mr. Gillham adopted, that a vote of thanks be extended to the chairman of the convention for the impartial and able manner he discharged the duties of presiding officer.

S. D. Fisher, } *Secretaries.*
Charles F. Mills, }



Hereford Bull, Hero 4352, exhibited by Thos. Clark, Beecher, Ill. Awarded Sweepstakes Premium, State Fair, 1884—p. 17.

EXHIBITORS

AT THE

ILLINOIS STATE FAIR, 1884.

CLASS A—CATTLE.

SHORT-HORN.

Baxter, Louisa, Haywood.
Geddes, A., Chicago.
Miller, Robert, West Liberty, Ia.
Milne, Robert, Lockport.

HEREFORD.

Caldwell, James, Bloom.
Clark, Thomas, Beecher.
Esson, E., Peotone.
Hack, Herman, Beecher.
Leigh, Geo. & Co., Aurora.
Sollitt, Charles, Beecher.

DEVON.

Morse, J. W. & Son, Verona, Wis.
Younger & Witmer, Fairbury.

POLLED ANGUS.

Anderson & Findlay, Lake Forest.
Geddes, A., Chicago.

HOLSTEIN OR FRIESIAN.

Brown, Geo. E. & Co., Aurora.
Emrick, G. M., Chicago.
Mann, S. S., Elgin.

JERSEY.

Hunter, Wm. H., Joliet.
Jones, H. C., Normal.

AYRSHIRE.

Stewart, John, Blackberry.

CLASS P—HORSES.

THOROUGHBRED.

Buckles, Wiley, Champaign.
Doty, A., Chicago.

ROADSTERS.

Armstrong, Andrew, Beason.
Cassteman, John, Chicago.
Caton Stock Farm, Joliet.
Chandler, Thos. W., Chicago.
Crockett, W. D., Waukegan.
Dorsey, L. L., Louisville, Ky.
Doty, Addison, Chicago.
Emmett, Wm., Chicago.
Feller, Chas. E., Chicago.
Fisher, J. W., Quincy.
Fleming, Geo., Chicago.
Gintve John, Sulphur Glenn.
Griffin, Thos., Chicago.
Hanscom, P. L., Chicago.
James, Mr., Ravenswood.
Kearns, R., Wyoming.
Kennedy, Thos., Oak Park.
Malley, Anson, Chicago.
Means, G. W., Hersman.
McFaren & Landrigan, Albion.
McFerran, J. C., Louisville, Ky.
McLaughlin, J. J., Clinton, Ont.
Muhlke, C. G., Deerfield.
Newman, John, Elgin.
Padfield, H. V., Belleville.
Pope, N. L., Chicago.
Sanborn, W. A., Sterling.
Scales, Y. D., Jacksonville.
Sharp, Aug., Louisville, Ky.
Smith, Geo., Chicago.
Stevenson, J. B., Virginia.
Virgin & Co., Fairbury.
Wadsworth, James, Chicago.
Wilcoxen, L. K., Lewistown.
Winman, Parker, Chicago.

NORMAN, PERCHERON.

Burgess Bros., Wenona.
Caton Stock Farm, Joliet.
Degen Bros., Ottawa.
Dillon Bros., Normal.
Hodgson, Ed., El Paso.
Huston, J. & C., Blandinsville.
Messenger, Horace I., Lockport.
Morse, E. D., Chicago.
Perry, James A., Wilmington.
Virgin & Co., Fairbury.
White Bros., Bloomington.
Winters, W. H., Princeton.

CLYDESDALE AND ENGLISH DRAFT.

Blair, Wm. S., New Lenox.
Blodgett, A. Z., Waukegan.
Brookside Farm Co., Fort Wayne, Ind.
Brown, Geo. E. & Co., Aurora.
Burgess Bros., Wenona.
Davis, J. & Son, Windsor, Ont.
Door Village Live Stock Assn., Door Village, Ind.
Dunlap, Andrew, Galesburg.
Fischer, D., Goderich, Ont.
Galbraith Bros., Janesville, Wis.
Holloway, R., Alexis.
Huston, J. & C., Blandinsville.
McDermid, Daniel, East Burlington
Moffatt, Wm. & Bro., Paw Paw.
Ogden, R. & Son, Cameron.

Patterson, Thomas, Farm Ridge.
Strawn, Abner, Ottawa.
Thom, W. & A., Milburn.
Treadwell, H. A., Elgin.
Truman, J. H., Bushnell.
Truman Bros., Mendota.
Warren, Geo. & Son, Fox Lake, Wis.
Zimmerman, Conrad, Lostant.

GRADE DRAFT.

Ayers, J. B., Danvers.
Brown, Geo. E. & Co., Aurora.
Burns, Edward, Gilbert's Station.
Dillon Bros., Normal.
Dunlap, A. F., Galesburg.
Fischer, D., Goderich, Ont.
Hodgson, Ed., El Paso.
McDaniel & Brown, Milton.
McDermid, Daniel, East Burlington.
McGregor & McIntosh, Brucefield, Ont.
Messenger, Horace I., Lockport.
Ogden, R. & Son, Cameron.
Soderbug, A. G., Osco.
Strawn, Abner, Ottawa.
Treadwell, H. A., Elgin.

HORSES FOR ALL WORK.

Armstrong, Andrew, Beasòn.
Brown, Geo. E. & Co., Aurora.
Coppage, J. L., Mt. Sterling.
Door Village Live Stock Assn., Door Village, Ind.
Dunlap, A. F., Galesburg.
Fischer, D., Goderich, Ont.
Kerns, David, Wyoming.
Means, G. W., Hersman.
Ogden, R. & Son, Cameron.
Perry, James A., Wilmington.
Ripburger, Adam, Elgin.
Stevenson, J. B., Virginia.
Tebo, J. W., Mt. Sterling.
Treadwell, H. A., Elgin.
Truman Bros., Mendota.
Warren, Geo. & Sons, Fox Lake, Wis.
White, C. B., Chicago.

SADDLE HORSES.

Eddy, C. B., Finchville, Ky.
Goodrich, Frank L., Chicago.
Hanscom, P. L., Chicago.
Hersman, C. G., Hersman.
Means, G. W., Hersman.
White, C. B., Chicago.

CARRIAGE HORSES.

Armstrong, Andrew, Beason.
Avery, John, Clinton, Ont.
Ayers, J. B., Danvers.
Buckles, Wiley, Champaign.
Dupee, John, Jr., Chicago.
Gilpin, Brown & Co., Chicago.
Hall, D. L. Chicago.
Kerns, R., Wyoming.
Means, G. W., Hersman.
Smith, Geo. Chicago.
The English Horse Exchange, Chicago.
Treadwell, H. A., Elgin.

GENTLEMEN'S DRIVING HORSES.

Armstrong, Andrew, Beason.
Ayers, J. B., Danvers.
Buckles, Wiley, Champaign.
Caton Stock Farm, Joliet.
Covert, Geo. H., Chicago.

Cummings, F. D., Chicago.
Davis, S. R., Bristol.
Dillingham, W. H., Louisville, Ky.
Dillon Bros., Normal.
Furman, W. C., Chicago.
Hall, D. L., Chicago.
Kennedy, Thos., Oak Park.
Loomis, Walter H., Sycamore.
Mally, Anson, Chicago.
Maloney, M. S., Belvidere.
Newgrass, L., Chicago.
Shannon, Wm., Mt. Carroll.
Smith, Geo., Chicago.
Stevenson, J. B., Virginia.
Warren, Geo. & Sons, Fox Lake, Wis.
Willard, C. P., Chicago.
Yates, H. H., Chicago.

EQUESTRIANISM—BOY'S RIDING.

Armstrong, H. W., Beason.
Blair, A. A., Chicago.
Blair, Donald, Chicago.
Palm, George, Chicago.
Palm, John, Chicago.

SADDLE PONIES.

Galbraith Bros., Janesville, Wis.

SPEED.

2-34 CLASS.

Carney, Daniel, Rockford.
Padfield, H., Belleville.
Sinclair, G. W., Salem, Ind.

COLTS 1 AND UNDER 2.

Caton Stock Farm, Joliet.
Clark, Walter.
McFerran, J. C., Louisville, Ky.
Scales, Y. D., Jacksonville.

2-22 CLASS.

Foley, Thos., Chicago.
Hodges, C. A., Battle Creek, Mich.
McFerran, J. C., Louisville, Ky.
Sinclair, G. W., Salem, Ind.
Sullivan, Wm., Mackinac, Mich.

COLTS 2 AND UNDER 3.

Brown, Geo. W., Sterling.
Caton Stock Farm, Joliet.
Wm. Emmett, Chicago.
Aug. Sharpe, Louisville, Ky.

COLTS 4 AND UNDER 5.

Clark, Walter.
Dorsey, L. L., Louisville, Ky.
McFerran, J. C., Louisville, Ky.
Sapp, D., Pekin.

ILLINOIS STALLION STAKE.

Carney, Dan, Rockford.
Crockett, W. D., Waukegan.
Padfield, H. V., Belleville.

2-20 PACING CLASS.

Foley, Wm., Chicago.
Graves, H., Chicago.
Morse, E. D., Chicago.
Sinclair, L. W.

2-40 Trot.

Clark, Wm.
Crockett. W. D., Waukegan.
Dorsey, L. L., Louisville, Ky.
Sinclair, L. W.
Sharp, Wm.
Wynman, Parker, Chicago.

2-27 Class.

Bull, Stephen, Racine, Wis.
Caton Stock Farm, Joliet.
Foley, Wm.
McFerran, J. C., Louisville, Ky.
Newgass, M., Chicago.
Padfield, H. V., Belleville.
Sinclair, G. W.

2-17 Trot.

Doble, Budd, Chicago.
Emmett, Wm., Chicago.
McFerran, J. C., Louisville, Ky.

CLASS C—SHEEP.

COTSWOLD.

Morgan, Thos., Camargo.
Newton, Mrs. Ann, Pontiac, Mich.
Strawn, Abner, Ottawa.
Willson, Frank, Jackson, Mich.

LEICESTER OR LINCOLN.

Graham, D. C., Cameron.
Newton, Mrs. Ann, Pontiac, Mich.

SOUTHDOWN.

Rupert, L. S., Bloomington.
Willson, Frank, Jackson, Mich.

SHROPSHIRD DOWN, HAMPSHIRE DOWN AND OTHER PURE-BRED MIDDLE WOOLS.

Allen, Geo. & Son, Archie.
Goldsborough, F. C., Easton, Md.
Morgan, Thomas, Camargo.
Newton, Mrs. Ann, Pontiac, Mich.
Stone & Loake, Stonington.
Strawn, Abner, Ottawa.
Willson, Frank, Jackson, Mich.

AMERICAN MERINO.

Adams, J. R., Atlanta.
Collins, G. W., Rockford.
Cook & Morse, Raymonds, O.
Kelley, Daniel & Son, Wheaton.
McFadden, G. W. & Bro., Atlanta.
Peck, E. & Sons, Geneva.
Short, A. T., Coldwater, Mich.

FLEECES.

LONG WOOL.

Angell, C. E. Oshkosh, Wis.
Graham, D. C., Cameron.
Strawn, Abner, Ottawa.

MIDDLE WOOL.

Angell, C. E., Oshkosh, Wis.
Strawn, Abner, Ottawa.

FINE WOOL.

Peck, E. & Sons, Geneva.

FLOCKS.

Allen, Geo. & Son, Archie.
Graham, D. C., Cameron.
Kelly, Daniel & Son, Wheaton.
McFadden, G. W. & Bro., Atlanta.
Morgan, Thomas, Camargo.
Peck, E. & Sons, Geneva.
Stone & Loake, Stonington.
Strawn, Abner, Ottawa.

CLASS D—SWINE.

BERKSHIRE.

Clark, H. H., Onarga.
Clifford & White, Wellington, O.
Daub & Mathers, Jacksonville.
Fulford, Alex. M., Belair, Md.
Gilmour, A. S. & Co., Greensburg, Ind.
Norton, W. C., Aldenville, Pa.
Rice, Tilford, Larchland.
Todd, D. W., Urbana, O.

POLAND CHINA.

Clark, H. H., Onarga.
Davis & Frazier, Mooreland, Ind.
Gilmour, A. S. & Co., Greensburg, Ind.
Nash, H. J., Urbana.
Railsback, B. T., Hopedale.
Rice, Tilford, Larchland.
Wait, E. & Son, LaGrange, Wis.
Williams, W. C. & Son, Knightstown, Ind.

CHESTER WHITE AND VICTORIA.

Daub & Mathers, Jacksonville.
Davis, Geo. F. & Co., Dyer, Ind.
Emrick, G. M., Chicago.
Moody, E. R., Eminence, Ky.
Stone, R. J., Stonington.
Todd, S. H., Wakeman, O.

ESSEX.

Kelly, Daniel & Son, Wheaton.
Reid, Abraham, Jacksonville.
Willson, Frank, Jackson, Mich.

SMALL YORKSHIRE AND SUFFOLK.

Norton, W. C., Aldenville, Pa.
Willson, Frank, Jackson, Mich.

DUROC JERSEY.

Kerns & Parker, Garden Plains.
Railsback, B. T., Hopedale.
Stoner, G. W., La Place.

CLASS E—POULTRY.

ASIATIC.

Bartlett, P. A., Jacksonville.
Bobb, T. K., Decatur.
Brabazon, J. R., Delavan. Wis.
Cass, James D., Beloit, Wis.
Davis, Henry, Dyer, Ind.
Davis, S. K., Bristol.
Emrick, G. M., Chicago.
Foot, J. B., Norwood Park.
Hunt, John J., Joliet.
Kennicott, E. E., Arlington Heights.
Miller, A. B., Shirland.
Powis, W. V. R., Chicago.
Sites, Eugene, West Dover, O.

DORKING, DOMINIQUE AND PLYMOUTH ROCK.

Bartlett, P. A., Jacksonville.
Brabazon, J. R., Delavan, Wis.
Cass, James D., Beloit Wis.
Davis, Henry, Dyer, Ind.
Emrick, G. M., Chicago.
Foot, J. B., Norwood Park.
Kennicott, E. E., Arlington Heights.
Lloyd, W. B., Prospect Park.
Miller, A. B., Shirland,
Munger, F. M., DeKalb.
Powis. W. V. R., Chicago.
Sites, Eugene, West Dover, O.
Young, A., Decatur.

SPANISH.

Bartlett, P. A., Jacksonville.
Brabazon, J. R., Delavan, Wis.
Cass, Jas. D., Beloit. Wis.
Emrick, G. M., Chicago.
Kennicott, E. E., Arlington, Heights.
Lloyd, W. B., Prospect Park.
Miller. A. B., Shirland.
Powis, W. V. R., Chicago.
Sites, Eugene, West Dover, O.
Young, A., Decatur.

GAME.

Bartlett, P. A. Jacksonville.
Benz & Wheelock, Decatur.
Brabazon, J. R., Delavan, Wis.
Cass, Jas. D., Beloit, Wis.
Sites, Eugene, West Dover, O.

BANTAM.

Bartlett, P. A., Jacksonville.
Benz & Wheelock, Decatur.
Bobb, T. K., Decatur.
Brabazon, J. R., Delavan, Wis.
Emrick, G. M., Chicago.
Marley, Chas., Chicago.
Marley & Lipke, Chicago.
Miller, A. B., Shirland.
Sites, Eugene, West Dover, O.

MISCELLANEOUS.

Bartlett, P. A., Jacksonville.
Benz & Wheelock, Decatur.
Brabazon, J. R., Delavan, Wis.
Cass, James D., Beloit, Wis.

Emrick, G. M., Chicago.
Miller, A. B., Shirland.
Peck, E. & Sons, Geneva.
Powis, W. V. R., Chicago.
Sites, Eugene, West Dover, O.

HAMBURGS.

Bartlett, P. A., Jacksonville.
Benz & Wheelock, Decatur.
Brabazon, J. N., Delavan, Wis.
Emrick, G. M., Chicago.
Johnson, J. H., Chicago.
Miller, A. B., Shirland.
Sites, Eugene, West Dover, O.
Young, A., Decatur.

POLISH.

Bartlett, P. A., Jacksonville.
Benz & Wheelock, Decatur.
Brabazon. J. R. Delavan, Wis.
Cass, Jas. D., Beloit, Wis.
Emrick, G. M., Chicago.
Miller, A. B., Shirland.
Sites, Eugene, West Dover, O.

FRENCH.

Bartlett, P. A., Jacksonville.
Benz & Wheelock, Decatur.
Brabazon, J, R., Delavan, Wis.
Emrick, G. M., Chicago.
Miller, A. B., Shirland.
Sites, Eugene, West Dover, O.

GUINEAS.

Bartlett, P. A., Jacksonville.
Brabazon, J. R., Delavan, Wis.
Cass, Jas., D., Beloit, Wis.
Emrick, G. M., Chicago.
Miller, A. B. Shirland.

TURKEYS.

Bartlett, P. A., Jacksonville.
Benz & Wheelock, Decatur.
Brabazon, J. R., Delavan, Wis.
Cass, Jas. D., Beloit, Wis.
Davis, Henry, Dyer, Ind.
Emrick, G. M., Chicago.

DUCKS.

Bartlett, P. A., Jacksonville.
Benz & Wheelock, Decatur.
Brabazon, J. R., Delavan, Wis.
Davis, Henry, Dyer, Ind.
Emrick, G. M., Chicago.
Miller, A. B., Shirland.
Sites, Eugene, West Dover, O.

GEESE.

Bartlett, P. A., Jacksonville.
Benz & Wheelock, Decatur.
Brabazon, J. R., Delavan, Wi .
Davis, Henry, Dyer, Ind.
Emrick, G. M., Chicago.
Sites, Eugene, West Dover, O.

RABBITS.

Bartlett, P. A., Jacksonville.

FERRETS.

Hawkes, Wm., Chicago.
Sites, Eugene, West Dover, O.

PIGEONS.

Bartlett, P. A. Jacksonville.
Benz & Wheelock, Decatur.
Emerick, G. M., Chicago.
Miller, A. B., Shirland.

CLASS F—MECHANICS.

STOVES, CASTINGS, WORKED METALS, ETC.

Bond & Woodruff, Chicago.
Carter, Schofield, Chicago.
Chicago Scale Co.. Chicago.
Ligonier Manufacturing Co., Ligonier, Ind.
Scott, Joseph, Chicago.
Templeton & Gifford, Chicago.

HOUSEHOLD FURNITURE.

Bent, P. & Co., Clinton, Ia.
Chicago Step Ladder Co., Chicago.
Childs, J. B., Chicago.
Lockland, Maggie D., Chicago.
Missouri Steam Washer Co., Chicago.
National Cooking Steamer Co., Lancaster, N. H.
Peterson, W. G., Yorkville.
West, O. C., Agent, Chicago.

DAIRY UTENSILS.

Batchelder, H. F. & Son, Rock Falls.
Boyd, John, Chicago.
DeLaval Cream Separator Co., New York, N. Y.
Everett, F. A., Quincy.
McDermid & Kennedy, Rockford.
Parmer, H. H. & Co., Rockford.

MANUFACTURES OF VARIOUS KINDS.

Babbitt, B. T., Chicago.
Chicago Forging Co., Chicago.
Fisher, J. H., Chicago.
Griswold, V. A., Chicago.
Harden Hand Grenade Fire Extinguishing Co., Chicago.
Heath & Milligan Mfg. Co., Chicago.
Illinois Printing Co., Danville.
Long, Edward, Chicago.
Oak Glen Drain Tile Co., Oak Glen.
Porter, W. R., Batavia.
Raven, L. A. & Co., Chicago.
Wilde, Jas. & Co., Chicago.

LEATHER, ETC.

Chicago Raw Hide Mfg. Co., Chicago.

SEWING AND KNITTING MACHINES AND SPINING WHEELS.

Austin, R., Chicago.
Chicago Scale Co., Chicago.
Keystone Spring Motor Co., Chicago.
New York Sewing Machine Mfg. Co., Plattsburg, N. Y.
Whitcomb, H. J. & Son, Chicago.

MINER'S TOOLS, COAL-MINING MACHINERY AND APPLIANCES.

Giles, Wm., Mt. Olive.
Taneyhill Bros., Fulton.

CLASS G—FARM PRODUCTS.

GRAINS AND SEEDS.

Angell, C. E., Oshkosh, Wis.
Hodge, W., Morris.
Hunt, John J., Joliet.
Edmonds, H. P., Taylor.
Emrick, G. M., Chicago.
Lloyd, W. B., Prospect Park.
Ogden, R. & Son, Cameron.
Peck, E. & Sons, Geneva.
Price, D. J., Ottawa.
Shedden, Robt., Udina.
Sibley, Hiram & Co., Chicago.
Vaughan, J. C., Chicago.
Vittum, E. A., Canton.
Vittum, John S., Canton.
Woodman, D., Paw Paw, Mich.

SEED CORN.

Bander, F. M., New Milford.
Bryant, E. W., Princeton.
Crain, W. R., Villa Ridge.
Edmonds, H. P., Taylor.
Hodge, W., Morris.
Hunt, John J., Joliet.
Kellenberger, E. P., Melville.
Kearns, J. B., Garden Plain.
Megginson, J. K., Jacksonville.
Peck, E. & Sons, Geneva.
Peterson, Wm., Stark.
Price, D. J., Ottawa.
Rush, Allen C., Pittsfield.
Shedden, Robt., Udina.
Sibley, Hiram & Co., Chicago.
Vaughan, J. C., Chicago.
Vittum, E. A., Canton.
Vittum, John S., Canton.

VEGETABLES.

American Stock Food Co., Chicago.
Carter, M., Oak Park.
Corbett, L. D., Prospect Park.
Davis, S. R., Bristol.
Dolton, Chas. H., Dolton.
Elsom, E., Oak Park.
Hodge, W., Morris.
Johnston, W. M. & Co., Chicago.
Lloyd, W. B., Prospect Park.
Price, D. J., Ottawa.
Shedden, Robt., Udina.
Sibley, Hiram & Co., Chicago.
Vaughan, J. C., Chicago.

BUTTER, CHEESE, ETC.

Davis, Geo. F. & Co., Dyer, Ind.
Hays, A., Belvidere.
Wolverton, D. C., Belvidere.

BREAD, CAKES, ETC.

Barnes, O. A., Chicago.
Blanchard, Mrs. Jas., Waukegan.
Boyden, Mrs. Emily M., Chicago.
Bronson, S. T., Belvidere.
Emrick, Mrs. G. M., Chicago.
Gregory, Emma, McHenry.
Guzeman, Mrs. Z. E. P., Chicago.
Hinsey, Maud, Pekin.
Johnson, E. H. & Bro., Chicago.
Keene, Mrs. Celia, Atlanta.
Lloyd, W. B., Prospect Park.
Mills, F. S., Wheaton.
Miller, Anna, Quincy.
Neal, Mrs. T. S., Quincy.
Nearing, Mrs. J., Kenney.
Newcomb, Sarah J.,
Patrick, Mrs. A., Marengo.
Robinson, Mrs. J. F., Atlanta.
Rockwell, Mrs. L. E., Quincy.
Royer, Emma, Sterling.
Thurston, Mrs. M. H., Chicago.
Treadwell, H. A., Elgin.
Trowbridge, Mrs. Laura, Chicago.
Woodruff, Mrs. R. J., Chicago.
Young, Mrs. J. J., Chicago.

CLASS H—HORTICULTURE AND FLORICULTURE.

FLOWERS AND PLANTS.

PROFESSIONALS ONLY.

Abbotts, F. V., Chicago.
Hackman, H. S., Peru.
Heffron, D. S., Washington Heights.
Vaughan, J. C., Chicago.
Wittbolds, Geo., Lake View.

CUT FLOWERS, FLORAL DESIGNS, ETC.

FOR PROFESSIONALS ONLY.

Baller, F. A., Bloomington.
Burdick, W. A. & Co., Rockford.
Hackman, H. S., Peru.
Heffron, D. S., Washington Heights.
Helmuth, Al. C., Chicago.
Hovey & Co., Chicago.
Toole, Wm., North Freedom, Wis.
Vaughan, J. C., Chicago.

CUT FLOWERS, FLORAL DESIGNS, ETC.

FOR AMATEURS ONLY.

Davidson, Mrs. Jas., Monticello, Ia.
Hewitt, Mrs. J. H., Chicago.
Hinsey, Mrs. C., Pekin.
Hinsey, Maud, Pekin.
Lewis, Helen A., Chicago.
Miller, Anna, Quincy.
Neal, Mrs. T. S., Quincy.
Nearing, Mrs. J., Kenney.
Patrick, Mrs. A., Marengo.
Thurston, Mrs. M. H., Chicago.

HOME-GROWN FRUITS.

FOR PROFESSIONALS ONLY.

Bailey, L. H., South Haven, Mich.
Baker, G. H., Cobden.
Beebe, O., South Haven, Mich.
Bryant, Arthur, Princeton.

Crain, W. R., Villa Ridge.
Dunlap, H. M., Leroy.
Gulley, A. G., South Haven, Mich.
Hammond, A. C., Warsaw.
Heffron, D. S., Washington Heights.
Hollister, E., Alton.
Johnson, James T., Warsaw.
Shedden, Robert, Udina.
South Haven and Casco Pomological Society, South Haven, Mich.
Warsaw Horticultural Society, Warsaw

HOME-GROWN FRUITS:

BY FARMER OR AMATEUR ONLY:

Blanchard, Mrs. Jas., Waukegan.
Henderson, Mrs. John P., Virden.
Nearing, Mrs. J., Kenney.
Patrick, Mrs. A., Marengo.
Shedden, Robert, Udina.
Smith, H. C., Tolono.
Standish, J. V. N., Galesburg.
Thing, L., Cobden.

JELLIES, PRESERVES, PICKLES, ETC.

Emrick, Mrs. G. M., Chicago.
Keene, Mrs. Celia, Atlanta.
Lacey, G. S., Chicago.
Robinson, Mrs J. F., Atlanta.
Sargent, Mrs. O. A., Windsor.
Sibley, Hiram & Co., Chicago.
Taggart, Mrs. Jennie, Decatur.

CLASS I—ARTS.

FINE ARTS.

Barnes, O. A., Chicago.
Bowman, Helen L., Lamoille.
Boyden, Mrs. Emily M., Chicago.
Boyden, Helen W., Chicago.
Braddock, Wm., Springfield.
Burghoffer, J. J. G., Chicago.
Davenport, Mrs. M. A., Chicago.
Day, Miss V. E., Chicago.
Dunsmore, Jennie, Greensburg, Ind.
Emerson, H. M., Chicago.
Fuller, Ida R., Chicago.
Hanstein, Herman, Chicago.
Hatch, W. F., Peoria.
Hewitt, L. J., Chicago.
Hills, Miss C. M., Chicago.
Horn, Mrs. Mary A., Chicago.
Hunt, Julia, Galesburg.
Johnson, Florence, Chicago.
Keene, Mrs. Celia, Atlanta.
Kellerman, Chas., Chicago.
Lewis, Helen A., Chicago.
Loomis, Mrs. Justine, Englewood.
Macklin, Mrs. Wm., Englewood.
Marxsen, Lewis, Chicago.
Mills, Miss F. S., Wheaton.
Moody, Mrs. M. T., Chicago.
Morefoot, Abbie, Englewood.
Neal, Mrs. T. S., Quincy.
Stagg, Mrs. P. G., Greensburg, Ind.
Truesdale, Mrs. G. S., Chicago.
Ventres, Mrs. O. G., Chicago.

DECORATIVE ART.

Boyden, Helen W., Chicago.
Bridgman, Mrs. J. W., Chicago.
Charon, Ida, Chicago.
Davenport, Mrs. M. A., Chicago.
Dunsmore, Jennie, Greensburg, Ind.
Eastman, Miss L. F., Chicago.
Hatch, W. F., Peoria.
Henderson, Mrs. Jno. P., Virden.
Hewitt, Mrs. J. H., Chicago.
Hills, Miss C. M., Chicago.

Hunt, Julia, Galesburg.
Johnson, Florence, Chicago.
Keeler, Fanny, Chicago.
Keene, Mrs. Celia, Atlanta.
Lewis, Helen A., Chicago.
Loomis, Mrs. Justine, Englewood.
Macklin, Mrs. Wm., Englewood.
Merritt, Sarah, Chicago.
Mills, Miss F. S., Wheaton.
Nearing, Mrs. J., Kenney.
Patrick, Mrs. A., Marengo.
Rockwell, Mrs. L. E., Quincy.
Stagg, Mrs. P. D., Greensburg, Ind.
Taggart, Mrs. Jennie, Decatur.
Trowbridge, Mrs. Laura, Chicago.
Ventres, Mrs. O. G., Chicago.

PHOTOGRAPHY, ETC.

Hanstein, Herman, Chicago.

CLASS K—TEXTILE FABRICS.

MANUFACTURED GOODS.

Berning, Amelia, Oak Park.
Blanchard, Mrs. Jas., Waukegan.
Boyden, Mrs. Emily M., Chicago.
Bush, Mrs. C. E., Downer's Grove.
Carman, Maggie, Chicago.
Cross, Dora, Albion, Pa.
Duncan, Mary E., Chicago.
Edwards, Mary E., Chicago.
Gillham, Mrs. E. L., Merritt.
Gregory, Emma, McHenry.
Guzeman, Mrs. Z. E. P., Chicago.
Henderson, Mrs. John P., Virden.
Hinsey, Mrs. C., Pekin.
Hinsey, Maud, Pekin.
Jones, Mrs. Susan, Mt. Sterling.
Keene, Mrs. Celia, Atlanta.
Lange, Mrs. J., Chicago.
Lloyd, W. B., Prospect Park.
Macklin, Mrs. Wm., Englewood.
Miller, Anna, Quincy.
Mills, F. S., Wheaton.
Neal, Mrs. T. S., Quincy.
Nearing, Mrs. J., Kenney.
Patrick, Mrs. A., Marengo.
Price, Mrs. W. H., Gurne.
Ransom, Mrs. E. D., Belvidere.
Robinson, Mrs. J. F., Atlanta.
Rockwell, Mrs. L. E., Quincy.
Shaffer, Mrs. M. S., Chicago.
Skeen, Mrs. J. C., Chicago.
Stagg, Mrs. P. D., Greensburg, Ind.
Taggart, Mrs. Jennie, Decatur.
Trowbridge, Mrs. Laura, Chicago.
Walker, Eva A., La Grange.
Wells, Ella, Lebanon, Ind.
Wilde, James, Jr., Chicago.
Woodruff, Mrs. R. J., Chicago.

QUILTS AND PATCHWORK.

Adley, Mrs. H., Chicago.
Blanchard, Mrs. James, Waukegan.
Cross, Dora, Albion, Pa.
Duncan, Mary E., Chicago.
Eastman, Miss L. F., Chicago.
Edwards, Mrs. Mary E., Chicago.
Evenhuis, Mrs. D. R., Chicago.
Gillham, Mrs. E. L., Merritt.
Gregory, Emma, McHenry.
Halibaugh, Mrs. Jas. F., Jacksonville.
Hein, Mrs. M. F., Chicago.
Hill, Mrs. J. G., Des Moines, Ia.
Hinsey, Mrs. C., Pekin.

Hinsey, Maud, Pekin.
Horn, Mrs. Mary A., Chicago.
Hyman, Annie I., Chicago.
Jones, Mrs. Susan, Mt. Sterling.
Keene, Mrs. Celia, Atlanta.
Lange, Mrs. J., Chicago.
Lyon, Mrs. J. W., Chicago.
Macklin, Mrs. Wm., Englewood.
Merritt, Sarah, Chicago.
Miller, Anna, Quincy.
Mills, D. Bell, Wheaton.
Mohler, Mrs. Geo., Sterling.
Moody, Mrs. M. T., Chicago.
Neal, Mrs. T. S., Quincy.
Nearing, Mrs. J., Kenney.
Owen, Mrs. E. M., McHenry.
Patrick, Mrs. A., Marengo.
Payne, Mrs. R. S., Chicago.
Price, Mrs. W. H., Gurne.
Ransom, Mrs. E. D., Belvidere.
Rockwell, Mrs. L. E., Quincy.
Royer, Emma, Sterling.
Ruggles, Mrs. R. H., Mendota.
Sanasack, Mrs. P., Bourbonnais.
Skeen, Mrs. J. C., Chicago.
Stagg, Mrs. P. D., Greensburg, Ind.
Taggart, Mrs. Jennie, Decatur.
Thurston, Mrs. M. H., Chicago.
Trowbridge, Mrs. Laura, Chicago.
Warren, Mrs. Fannie, Chicago.
Workman, Lulu, Chicago.

ORNAMENTAL NEEDLE WORK.

Blanchard, Mrs. James, Waukegan.
Boyden, Mrs. Emily, Chicago.
Duncan, Mary E., Chicago.
Eastman, L. F., Chicago.
Gregory, Emma, McHenry.
Henderson, Mrs. John P., Virden.
Hewitt, Mrs. J. H., Chicago.
Hill, Mrs. J. G., Des Moines, Iowa.
Hinsey, Maud, Pekin.
Horn, Mrs. Mary A., Chicago.
Hunt, Julia, Galesburg.
Keene, Mrs. Celia, Atlanta.
Lange, Mrs. J., Chicago.
Loomis, Mrs. Justine, Englewood.
Macklin, Mrs. Wm., Englewood.
McClintock, Mrs. Geo., Chicago.
Miller, Anna, Quincy.
Mills, Miss F. S., Wheaton.
Neal. Mrs. T. S., Quincy.
Nearing, Mrs. J., Kenney.
Nowlan, Mrs. Jas., Toulon.
Patrick, Mrs. A., Marengo.
Payne. Mrs. R. S., Chicago.
Price, Mrs. W. H., Gurne.
Ranson, Mrs. E. D. Belvidere.
Robinson, Mrs. J. F., Atlanta.
Rockwell, Mrs. L. E., Quincy.
Royer, Emma, Sterling.
Stagg, Mrs. P. D., Greensburg, Ind.
Taggart, Mrs. Jennie'Decatur.
Thurston, Mrs. M. H., Chicago.
Trowbridge, Mrs. Laura, Chicago.
Upham, Mrs. E. W., Waukegan.
Warren, Mrs. Fannie, Chicago.
Wells, Ella, Lebanon, Ind.
Woodruff, Mrs. R. J. Chicago.
Workman, Lulu, Chicago.

FANCY WORK.

Berning, Amelia, Oak Park.
Blanchard, Mrs. James, Waukegan.
Bush, Mrs. C. E., Downer's Grove.
Cross, Dora, Albion, Pa.
Duncan, Mary E., Chicago.
Dunlap, Mrs. H. M., Leroy.
Eastman, Miss L. F., Chicago.
Guzeman, Mrs. Z. E. P., Chicago.

Hill, Mrs. J. G., Des Moines, Ia.
Hinsey, Maud, Pekin.
Hunt, Julia, Galesburg.
Jones, Mrs. Susan, Mt. Sterling.
Keene, Mrs. Celia, Atlanta.
Lange, Mrs. J., Chicago.
Mackness, Mrs. C., Chicago.
McClintock, Mrs. Geo., Chicago.
Miller, Anna, Quincy.
Mills, Miss F. S., Wheaton.
Neal, Mrs. T. S., Quincy.
Nearing, Mrs. J., Kenney.
Nowlan, Mrs. Jas., Toulon,
Patrick, Mrs. A., Marengo.
Price, Mrs. W. H., Gurne.
Robinson, Mrs. J. F., Atlanta.
Rockwell, Mrs. L. E., Quincy.
Royer, Emma, Sterling.
Sanasack, Mrs. P., Bourbonnais.
Stagg, Mrs. P. D., Greensburg, Ind.
Taggart, Mrs. Jennie, Decatur.
Trowbridge, Mrs. Laura, Chicago.
Upham, Mrs. E. W., Waukegan.
Warren, Mrs. Fannie, Chicago.
Wells, Ella, Lebanon, Ind.
Woodruff, Mrs. R. J., Chicago.
Workman, Lulu, Chicago.

Machine Work.

Davis Sewing Machine Co., Chicago.
Domestic Sewing Machine Co., Chicago.

Display of Ladies' Work.

Blanchard, Mrs. Jas., Waukegan.
Boyden, Mrs. Emily M., Chicago.
Chidley, Mrs. S. E., Chicago.
Duncan, Miss Mary E., Chicago.
Gregory, Emma, McHenry.
Hill, Mrs. J. G., DesMoines, Ia.
Hinsey, Maud, Pekin.
Keene, Celia, Atlanta.
Lange, Mrs. J., Chicago.
McClintock, Mrs. Geo., Chicago.
Miller, Anna. Quincy.
Neal, Mrs. T. S., Quincy.
Nearing, Mrs. J., Kenney.
Nowlan, Mrs. James, Toulon.
Patrick, Mrs. A., Marengo.
Ransom, Mrs. E. D., Belvidere.
Rockwell, Mrs. L. E., Quincy.
Royer, Emma, Sterling.
Stagg, Mrs. P. D., Greensburg, Ind.
Taggart, Mrs. Jennie, Decatur.
Trowbridge, Mrs. Laura, Chicago.
Woodruff, Mrs. R. J., Chicago.

CLASS L—EDUCATION AND SCIENCE.

Graded School Exhibit.

Austin School.
Belleville School, Belleville.
Blue Island School.
Braidwood School.
Douglas School, Springfield.
Edwards School, Springfield.
Forestville School.
Harlem School.
Joliet Schol.
Lake View School, No. 1.
Lake View School, No. 2.
Lincoln School.
Mascoutah School.
Oakland School.

Oak Park School.
Palmer School, Springfield.
Ravenswood School.
Streator School.
Superintendent Public Schools, Braidwood.
" " " Joliet.
" " " Lake View, No. 1.
" " " Lake View, No. 2.
" " " Oakland.
" " " Springfield.

HIGH SCHOOL EXHIBIT.

Chicago High School.
Danville High School.
Evanston High School.
Farmington High School.
Joliet High School.
Lake View High School.
Lanark High School.
Moline High School
Springfield High School.

COUNTRY SCHOOL EXHIBIT.

Dist. 9, etc., Tp. 44, range 3, Boone county.
" 1, Tp. 46, range 4, Boone county.
" 5, Lyons Tp., Cook county.
" 1, Leyden Tp., Cook county.
" 5, New Trier Tp., Cook county.
" 2, Jefferson Tp., Cook county.
" 4, Bloom Tp., Cook county.
" 4, Thornton Tp., Cook county..
" 4, Tp. 37, range 14, Cook county.
" 1, Lyons Tp., Cook county.
" 5, Lake and Hyde Park Tps., Cook county.
" 4, Calumet Tp., Cook county.
" 1, Bloom Tp., Cook county.
" 10, Wheeling Tp., Cook county.
" 2, Maine Tp., Cook county.
" 10, Tp. 42, range 9, Cook county.
" 6, Lake Tp., Cook county.
" 1, Tp. 24, R. 8, Ford county.
" 2, Tp. 23, R. 8, Ford county.
" 5, Tp. 25, R. 9, Ford county.
" 3, Tp. 25, R. 7, Ford county.
" 4, Tp. 10 N., R. 5 W., Henderson county.
" 4, Tp. 11 N., R. 4 W., Henderson county.
" 9, Tp. 10 N., R. 4 W., Henderson county.
" 3, Cedar Tp., Knox county.
" 9, Tp. 11 N., R. 1 E., Knox county.
" 7, Henderson Tp., Knox county.
" 9, Galesburg Tp., Knox county.
" 9, Manlius Tp., LaSalle county.
" 2, Tp. 35, R. 4, LaSalle county.
" 9, Tp. 32, R. 3, LaSalle county.
" 5, Tp. 31, R. 5, LaSalle county.
" 4, Tp. 35, R. 1, LaSalle county.
" 4, Tp. 33, R. 1, LaSalle county.
" 4, Tp. 32, R. 1 E., LaSalle county.
" 1, Tp. 30, R. 2, Marshall county.
" 8, Tp. 30 N., R. 1 W., Marshall county.
" 7, Tp. 12, R. 8, Marshall county.
" 7, Tp. 24, R. 8, Ogle county.
" 7, Tp. 24, R. 11, Ogle county.
" 5, Tp. 24, R. 8, Ogle county.
" 1, Tp. 4 S., R. 8 W., Randolph county.
" 2, Tp. 4 S., R. 8 W., Randolph county.
" 4, Tp. 2 S., R. 7 W., St. Clair county.
" 3, Tp. 3 S., R. 6 W., St. Clair county.
Millstadt School, St. Clair county.
Dist. 4, Tp. 1 S., R. 8 W., St. Clair county.
" 2, Tp. 1 S., R. 9 W., St. Clair county.
" 3, Tp. 16, R. 7, Sangamon county.
" 3, Tp. 16, R. 6, Sangamon county.
" 1, Tp. 16, R. 3, Sangamon county.
" 5, Tp. 17, R. 4, Sangamon county.
" 1, Tp. 13, R. 5, Sangamon county.
" 3, Hopkins Tp., Whiteside county.
" 7, Tp. 22, R. 7, Whiteside county.
" 2, Tp. 21, R. 7, Whiteside county.
" 4, Tp. 21, R. 6, Whiteside county.

Dist. 7, Tp. 21, R. 6, Whiteside county.
" 3, Tp. 21, R. 3 E., Whiteside county.
" 5, Tp. 22, R. 7, Whiteside county.
" 4, Tp. 21, R. 4 E., Whiteside county.
" 1, Tp. 21, R. 4 E., Whiteside county.
" 7, Tp. 35, R. 12, Will county.
" 2, Tp. 34, R. 14, Will county.
" 10, Tp. 34, R. 10, Will county.
" 6, Tp. 35, R. 11, Will county.
" 1, Tp. 36, R. 9, Will county.
" 6, Tp. 33, R. 12, Will county.
" 2, Tp. 35, R. 11, Will county.
County Superintendent of Schools, Boone county.
" " " Cook county.
" " " Ford county.
" " " Henderson county.
" " " Knox county.
" " " LaSalle county.
" " " Marshall county.
" " " Ogle county.
" " " Randolph county.
" " " St. Clair county.
" " " Sangamon county.
" " " Whiteside county.
" " " Will county.

TAXIDERMY, MINERALOGY AND CONCHOLOGY.

Braddock, Wm., Springfield.
Davidson, Mrs. James, Monticello, Ia.
Hackman, H. S., Peru.
Head, Effie C., Chicago.
Head, James M., Chicago.
Nearing, Mrs. J., Kenney.
Wiess, J. M., Chicago.

ENTOMOLOGY, ETC.

Bander, F. M., New Milford.
Braddock, Wm., Springfield.
Carter, M., Oak Park.
Hackman, H. S., Peru.
Hockaday, C. L., Deerfield.

MUSICAL INSTRUMENTS.

Estey & Camp, Chicago.
Rice, G. S., Chicago.

PRINTING, ENGRAVING, ETC.

Evenhins, Mrs. D. R., Chicago.
Robinson, Mrs. J. F., Atlanta.

ARCHITECTURAL AND MECHANICAL DRAWINGS.

Bryant, J. P., Princeton.
Cunningham, Jas. A., Virginia.

CLASS N—AGRICULTURAL IMPLEMENTS.

ENGINES, PUMPS, ETC.

American Live Stock Salt Roller Co., Chicago.
American Well Works, Aurora.
Appleton Mfg. Co., Appleton, Wis.
Barber, A. L., Chicago.
Bradley, David, Mfg. Co., Chicago.
Bruner, Chas., Peru.
Case & Willard Threshing Machine Co., Battle Creek, Mich.

Clark & Co., Somonauk.
Davis, A. M., Alton.
Davis, J. P. & Sons, Chicago.
Gizar Mfg. Co., Waynesboro, Pa.
Hatch & Riesberg, Peoria.
Heaton, J. P., Newman.
Joliet Wire Check Rower Co., Joliet.
Kingsman & Co., Peoria.
Marseilles Mfg. Co., Marseilles.
Mast, Foos & Co., Springfield, O.
Milling Lumber Co., East Grove.
Motor Works, Beloit, Wis.
Myers, House & Co., Canton, O.
Nichols, Shepard & Co., Battle Creek, Mich.
North Western Hardware Co., Chicago.
Northwestern Mfg. and Car Co., Stillwater, Minn.
Pitts Agrl. Works, Buffalo, N. Y.
Portable Iron Roller Mill Co., Chicago.
Rice, Whitacre & Co., Chicago.
Sandwich Mfg. Co., Sandwich.
Schoendler, W., Appleton, Wis.
Star Gate Co., Abingdon.
Taylor Horse Power Co., Chicago.
Temple Pump Co., Chicago.
U. S. Wind Engine Co., Batavia.

Mills, Machines, Etc.

Adams, R. B., Columbus, O.
American Grinding Mill Co., Chicago.
American Well Works, Aurora.
Appleton Mfg. Co., Appleton, Wis.
Bristol, E. S. & Gale, Chicago.
Burnett, J. Y., Lamoille.
Challenge Wind and Feed Mill Co., Batavia.
Chicago Ditching Machine Co., Chicago.
Clark, H. H., Chicago.
Clark & Co., Somonauk.
Foos Mfg. Co., Springfield, O.
Freeport Machine Co., Freeport.
Gault, Z. T., Mfg. Co., Sterling.
Kane, Thos. & Co., Chicago.
Keystone Mfg. Co., Sterling.
Kingsman & Co., Peoria.
Lamborn Road Machine Co., Brighton.
Marseilles Mfg. Co., Marseilles.
New Era Mfg. Co., Chicago.
Penfield, J. W. & Son, Willoughby, O.
Pennock, S. & Sons Co., Fort Wayne, Ind.
Portable Iron Roller Co., Chicago.
Raymond Bros., Chicago.
Smith, M. O., New Buffalo, Mich.
Stewart, C. H., Chicago.
Stover Mfg. Co., Freeport.
Taft, G. W., Abington, Conn.
U. S. Wind Engine Co., Batavia.
Whitman Agrl. Co., St. Louis, Mo.
Winchester & Partridge Mfg. Co., Whitewater, Wis.
Valentine, George, Monticello.

Vehicles.

Abbott Buggy Co., Chicago.
Allbee, John B., Hinckley.
Bristol, E. S. & Gale, Chicago.
Decatur Iron Felloe Wagon Co., Decatur.
Daily, M., Waterman.
Hewitt, J. W., Jackson, Mich.
King, Hamilton & Co., Ottawa.
Kingman & Co., Peoria.
King Whippletree Co., Chicago.
LaBelle Wagon Works, Fond du Lac, Wis.
Marseilles Manufacturing Co., Marseilles.
McCallum, J. & Bros., South Elgin.
McNeal, W. D., Chicago.
Moline Wagon Co., Moline.
Racine Wagon and Carriage Co., Racine, Wis.
Schuttler & Hotz, Chicago.
Spencer, G. H. & Co., Chicago.
Weber Wagon Co., Chicago.
Weddle & Co., Chicago.
Weir Plow Co., Monmouth.

GRAIN HARVESTERS, ETC.

Ashley Wire Co., Joliet.
Aultman, C. & Co., Canton, O.
Bristol, E. S. & Gale, Chicago.
Case & Willard Threshing Machine Co., Battle Creek, Mich.
Deering, Wm. & Co., Chicago.
Dennett Harvesting Machine Co., Milwaukee, Wis.
Farmers' Friend Mfg. Co., Dayton, O.
Fockler, C., East Dubuque.
Frost, C. H., Plano.
Gere, Truman, Platt & Co., Owego, N. Y.
Hart, Hitchcock & Co., Peoria.
Hasselman, L. W. & W., Jr., Indianapolis, Ind.
Hoover & Gamble, Miamisburg, O.
Johnson & Field, Racine, Wis.
Johnston Harvester Co., Chicago.
Kingman & Co., Peoria.
McCormack, H. M. & Co., Chicago.
McSherry, D. & Co., Dayton, O.
Menefield, C. E. & Co., Indianapolis, Ind.
Minneapolis Harvester Works, Minneapolis, Minn.
Morgan, D. S. & Co., Chicago.
Northwestern Mfg. and Car Co., Stillwater, Minn.
O'Brien, L. C., Janesville, Wis.
Pitts Agrl. Works, Buffalo, N. Y.
Reed, A. M., Whitewater, Wis.
Russell Harvesting Machine Co., Polo.
Sandwich Mfg. Co., Sandwich.
Warder, Bushnell & Glessner, Chicago.
Winona Harvester Works, Winona, Minn.

HAYING MACHINERY, ETC.

Acme Hay Harvesting Co., Peoria.
Albion Mfg. Co., Albion, Mich.
Appleton Mfg. Co., Appleton, Wis.
Beck & Hopkins, Chicago.
Belle City Mfg. Co., Racine, Wis.
Birdsell Mfg. Co., South Bend, Ind.
Bookwalter, J. W., Springfield, O.
Bristol, E. S. & Gale, Chicago.
Burbank & Coventry, Harvard.
Chicago Hay Press Co., Chicago.
Dederick, P. K., Chicago.
Dennett Harvesting Machine Co., Milwaukee.
Douglas, E. G., Elgin.
Eagle Fork Co., Appleton, Wis.
Emmerson, Talbott & Co., Rockford.
Ertel, Geo. & Co., Quincy.
Famous Manufacturing Co., Quincy.
Frost, C. H., Plano.
Fuller & Johnson Manufacturing Co., Madison, Wis.
Hart, Hitchcock & Co., Peoria.
Hoover & Gamble, Miamisburg, O.
Hopkins Manufacturing Co., Chicago.
Howser, J. V., Sidney.
Hunt, Helm & Fenis, Harvard.
Janesville Hay Tool Co., Janesville, Wis.
Johnston Harvesting Co., Chicago.
Kappe & Dabb, Belleville.
Keystone Manufacturing Co., Sterling.
Kingman & Co., Peoria.
Maury, J. P., Mower Co., Rockford.
Mast, Foos & Co., Springfield, O.
McCormick, H. M. & Co., Chicago.
McSherry, D. E. & Co., Dayton, O.
Miller & Johnson Manufacturing Co., Madison, Wis.
Milwaukee Hay Tool Co., Milwaukee, Wis.
Morgan, D. S. & Co., Chicago.
Myers, House & Co., Canton, Ohio.
Newark Machine Co., Newark, Ohio.
O'Brien, L. C., Janesville, Wis.
Porter, J. A., Ottawa.
Quincy Manufacturing Co., Quincy.
Rice, Whitacre & Co., Chicago.
Ross, E. W. & Co., Fulton, N. Y.
Rouse, G. W. & Son, Peoria.
Russell Harvesting Machine Co., Polo.
Shawnee Agricultural Co., Xenia, O.
Slawson & Jones, Racine, Wis.
Springfield Manufacturing Co., Springfield, O.
Sterling Manufacturing Co., Sterling.
Thomas, J. H. & Son, Springfield, O.

U. S. Wind Engine Co., Batavia.
Utter Manufacturing Co., Rockford.
Warder, Bushnell & Glessner, Chicago.
Warrior Mower Co., Little Falls, N. Y.
Whitman Agricultural Co., St. Louis, Mo.
Winona Harvester Works, Winona, Minn.
Wrate, List & Wild, Belvidere.

PLANTERS, PLOWS, ETC.

Albion Manufacturing Co., Albion, Mich.
Alexander, R. W., Galesburg.
Althouse, Wheeler & Co., Waupun, Wis.
American Grinding Mills Co., Chicago.
Appleton Manufacturing Co., Appleton, Wis.
Atkinson, Charles, Chicago.
Avery Planter Co., Peoria.
Banks, W. H. & Co., Chicago.
Bradley, David, Manufacturing Co., Chicago.
Briggs & Enoch, Rockford.
Bristol, E. S. & Gale, Chicago.
Brown, Geo. W., Galesburg.
Brown Manufacturing Co., Zanesville, O.
Case, J. I., Plow Co., Racine, Wis.
Challenge Corn Planter Co., Grand Rapids, Mich.
Challenge Wind & Feed Mill Co., Batavia.
Chambers, Bering, Quinlan & Co., Decatur.
Clark & Co., Somonauk.
Cole & Fleming, Springfield, O.
Deere & Co., Moline.
Deer & Mansur Co., Moline.
Elkhart Iron Works Co., Elkhart, Ind.
Emmerson, Tolcott & Co., Rockford.
Fairbanks, Morse & Co., Chicago.
Farmers' Friend Manufacturing Co., Dayton, O.
Farris, Robert, Decatur.
Fish & Middaugh, Clarendon Hills.
Freeport Machine Co., Freeport.
Fuller & Johnson Manufacturing Co., Madison, Wis.
Gere, Truman, Platt & Co., Owego, N. Y.
Gilmore, J. H., Chicago.
Haworth & Sons, Decatur.
Hone, James, Morris
Joliet Wire Check Rower Co., Joliet.
Keystone Manufacturing Co., Sterling.
King & Hamilton, Ottawa.
Kingman & Co., Peoria.
Klinefelter & Dillman Co., Joliet.
Lean, R., Mansfield, O.
Marseilles Manufacturing Co., Marseilles.
Mast, Foos & Co., Springfield, O.
McCallum, John & Bro., South Elgin.
Miller, C. H., Millington.
Nichols & Murphy, Elgin.
Odell, C. F., Fairbury.
Parlin & Orendorff Co., Canton.
Pattee Plow Co., Monmouth.
Peru City Plow Co., Peru, Ind.
Ray Plow Co., Burlington, Ia.
Richmond Check Rower Co., Richmond, Ind.
Sandwich Manufacturing Co., Sandwich.
Schroeder, Ernest C., Itasca.
Slosson Bros., Verona.
Sterling Manufacturing Co., Sterling.
Stover Manufacturing Co., Freeport.
U. S. Wind Engine Co., Batavia.
Utter Manufacturing Co., Rockford.
Warrior Mowing Co., Little Falls, N. Y.
Weir Plow Co., Monmouth.
Wood & Pettig, Peru, Ind.

LIST OF AWARDS

AT THE

ILLINOIS STATE FAIR, 1884.

CHICAGO, SEPTEMBER 8-13.

CLASS A—CATTLE.

JOHN P. REYNOLDS, *Superintendent.*

LOT 1—SHORT-HORNS.

BULLS.

Bull 3 years old or over—2 entries:
  First premium, Robert Miller, West Liberty, Ia.......... $25 00
    Orange Lad; calved January 6, 1878; bred by John Dryden, Dryden, Ont.; sire, Royal Brampton (32996); dam, Lovely.
  Second premium, Robert Miller, West Liberty, Ia.......... 15 00
    Scotland's Pride; calved, 1881; bred by Mr. Watt.

Bull 2 years old and under 3—no entry.

Bull 1 year old and under 2—3 entries:
  First premium, Robert Milne, Lockport.......... 20 00
    Butterfly's Champion; calved March 30, 1883; bred by Robert Milne, Lockport; sire, King William 34255; dam, Butterfly 38th.
  Second premium, Robert Miller, West Liberty, Ia.......... 10 00
    Young Commander; calved August 28, 1883; bred by Robert Miller, West Liberty, Ia.; sire, Commander (41637); dam, Columbia.

Bull under 1 year old—2 entries:
  First premium, Robert Miller, West Liberty, Ia.......... 15 00
    Young Earl; calved September 15, 1884; bred by Robert Miller, West Liberty, Ia.; sire, Earl of Aberdeen 45992; dam, Silvery.
  Second premium, A. Geddes, Chicago.......... 10 00
    Bruce; calved February 15, 1884; bred by Bruce Huntly, Scotland; sire, Manfred; dam, Pomona.

COWS.

Cow 4 years old or over—2 entries:
  First premium, Robert Miller, West Liberty, Ia.......... $25 00
    Abbie Oxford; calved December 27, 1879; bred by Wm. Stephenson & Sons, Little Indian; sire, Canadian Prince; dam, Ida Oxford.
  Second premium, Robert Miller, West Liberty, Ia.......... 15 00
    Evening Star; calved January 12, 1878; bred by J. I. Davidson, Balsam, Ont.; sire, Crown Prince of Athelstane 20th (16585); dam, Evening Star.

Cow 3 years old and under 4—2 entries:
First premium, A. Geddes, Chicago $25 00
Princess Louise; calved February 9, 1881; bred by Bruce Huntly, Scotland; sire, Ben Lomond 41098; dam, Princess Mary 4th.
Second premium, Robert Milne, Lockport 15 00
Virginia 11th; calved September 25, 1880; bred by Robert Milne, Lockport; sire, Master Bates 30301; dam, Virginia 2d.

Cow 2 years old and under 3—4 entries:
First premium, Robert Miller, West Liberty, Ia 25 00
Poppy 36th; calved May 29, 1882; bred by Abe Renick, Clintonville, Ky.; sire, 4th Airdrie of Sharon 49717; dam, Poppy 13th.
Second premium, Robert Miller, West Liberty, Ia 15 00
Poppy 33d; calved December 29, 1881; bred by Abe Renick, Clintonville, Ky.; sire, 7th Duke of Sharon 43528; dam, Poppy 23d.

Heifer 1 year old and under 2—4 entries:
First premium, Robert Miller, West Liberty, Ia 20 00
Rose of Honor; calved 1883; bred by Robert Miller, West Liberty, Ia.; sire, Frederick William.
Second premium, Robert Miller, West Liberty, Ia 10 00
Butterfly of Oakland; calved 1883; bred by J. H. Potts & Son, Jacksonville.

Heifer under 1 year old—3 entries:
First premium, Robert Miller, West Liberty, Ia 15 00
Maud; calved 1884; bred by Robert Miller, West Liberty, Ia.; sire, Frederick William.
Second premium, Robert Miller, West Liberty, Ia 10 00
Little Queen; calved 1884; bred by Robert Miller, West Liberty, Ia.; sire, Orange Lad.

Awarding Committee—Wash Graff, Ashland; Moses Wentworth, Chicago; Robert Otley, Kewanee.

LOT 2—SHORT-HORNS—HERD.

Herd—Bull 2 years old or over; cow 3 years old or over; heifer 2 years old and under 3; heifer 1 year old and under 2; heifer under 1 year old—2 entries:
Premium, Robert Miller, West Liberty, Ia $50 00
Scotland's Pride; Abbie Oxford; Beaty's Pride; Rose of Honor.

Awarding Committee—Abijah Power, Prairieville; B. F. Montgomery, Petersburg; George H. Stookey, Freeburg.

LOT 3—SHORT-HORNS—SWEEPSTAKES.

Bull any age—3 entries:
Premium, Robert Miller, West Liberty, Ia $50 00
Orange Lad.

Cow or Heifer any age—7 entries:
Premium, Robert Miller, West Liberty, Ia 50 00
Poppy 36th.

Awarding Committee—W. W. Gray, Chebanse; C. S. Brown, Berlin; T. H. Baker, Davis Junction.

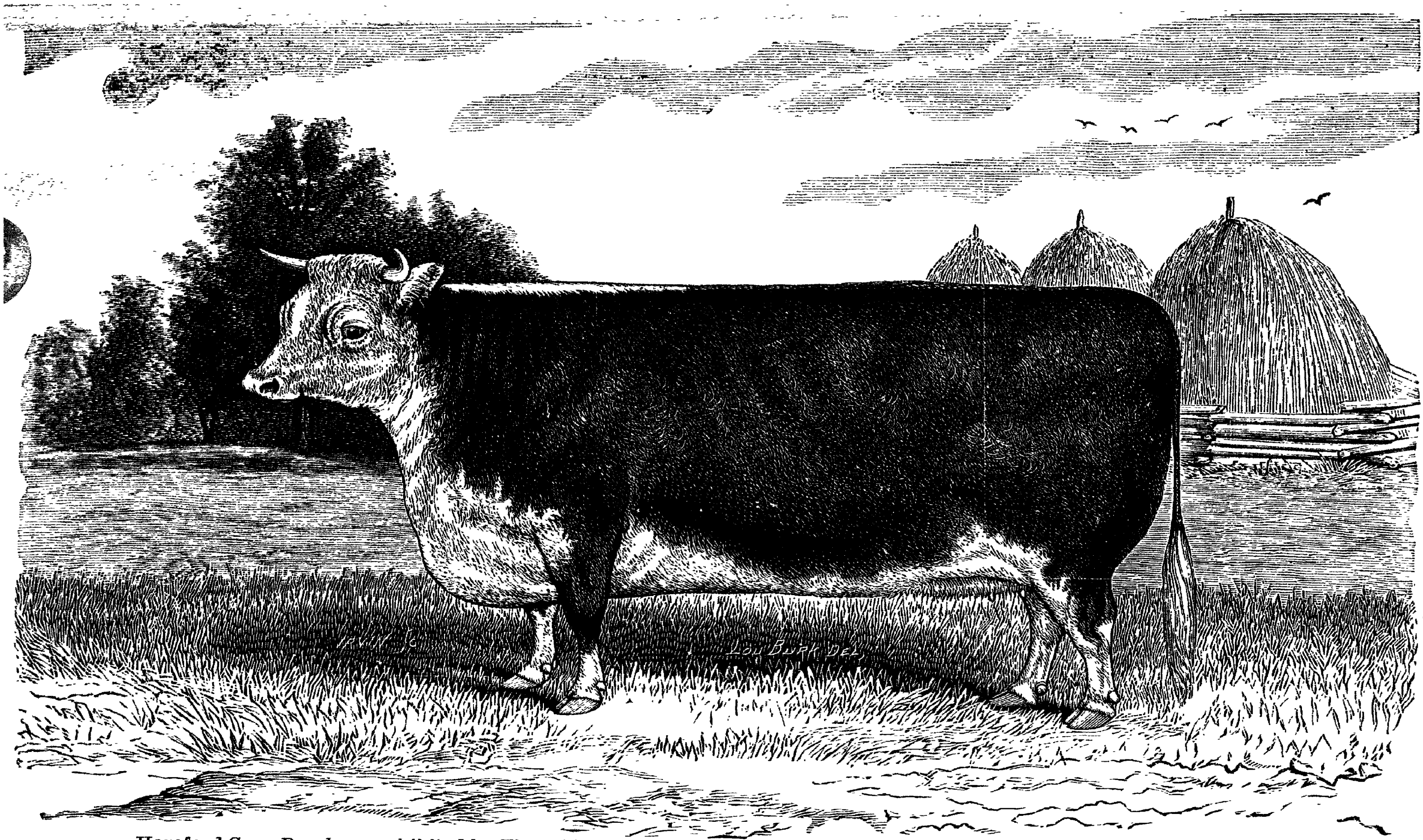
LOT 4—HEREFORDS.

BULLS.

Bull 3 years old or over—1 entry:
First premium, Thos. Clark, Beecher $25 00
Hero 4352 (5964); calved June 17, 1879; bred by J. Price, Pembridge, Eng.; sire, Regulus 3849 (4076); dam, Spot 3347.

Bull 2 years old and under 3—2 entries:
First premium, E. Esson, Peotone 25 00
Regulator 6512; calved March 20, 1882; bred by E. Esson, Peotone; sire, Prosey 4148 (6627); dam, Hope 3114.

Bull 1 year old and under 2—3 entries:
First premium, Geo. Leigh & Co., Aurora 20 00
Conqueror 9561; calved March 26, 1883; bred by J. J. Davis, Beecher; sire, Druid (9449); dam, Formosa 5th (9562).
Second premium, Thos. Clark, Beecher 10 00
Fair Boy 2d (7613); calved Nov. 18, 1882; bred by R. Farr, Deuchurch, Eng.; sire, Adforton (5179); dam, Wilding 4th.


LOU BURK DEL.

Hereford Cow, Peerless, exhibited by Thos. Clark, Beecher, Ill. Awarded Sweepstakes Premium, State Fair, 1884.—p. 39.

Bull under 1 year old—2 entries:
First premium, Geo. Leigh & Co., Aurora $15 00
Royal Lad; calved Dec. 4, 1883; bred by Wm. Constable, Beecher; sire, Hero (4352); dam, Greenhorn (4437).

COWS.

Cow 4 years old or over—1 entry:
First premium, Thos. Clark, Beecher $25 00
Peerless; calved May 24, 1880; bred by T. J. Cardmine, England; sire, Lord Wilton (4740); dam, Delight.

Cow 3 years old and under 4—1 entry:
First premium, Thos. Clark, Beecher 25 00
Dutchess 12th; calved October 25, 1880; bred by J. B. and G. H. Green, England; sire, Merry Monarch (5466); dam, Dutchess 7th.

Heifer 2 years old and under 3—2 entries:
First premium, Thos. Clark, Beecher 25 00
Silver; calved Feb. 8, 1882; bred by Thos. Clark, Beecher; sire, Anxiety 3d 4466 (6181); dam, Sunflower 1425.
Second premium, Thos. Clark, Beecher 15 00
Jessie 2d; calved Jan. 11, 1882; bred by Thos Clark, Beecher; sire, Mars 14th 4471 (6063); dam, Jessie 2668.

Heifer 1 year old and under 2—8 entries:
First premium, Thos. Clark, Beecher 20 00
Flossie; calved Nov. 20, 1882; bred by Thos Clark, Beecher; sire, Anxiety 3d 4466 (6181); dam, Fancy 1973.
Second premium, Thos Clark, Beecher 10 00
Lovely; calved Nov. 5, 1882; bred by Thos. Clark, Beecher; sire, Anxiety 3d 4466 (6181); dam, Lady 2227.

Heifer under 1 year old—2 entries:
First premium, James Caldwell, Bloom 15 00
Lady Clark; calved Oct. 1, 1883; bred by Thos. Clark, Beecher; sire, Anxiety 3d 4466 (6181); dam, Nellie 2d 1424.
Second premium, Thos. Clark, Beecher 10 00
Gem Wilder; calved Nov. 6. 1883; bred by Thos. Clark, Beecher; sire, Anxiety 3d 4466 (6181); dam, Gem 16th 4463.

Awarding Committee—Wm. Brown, Berlin; E. W. Thompson, Sugar Grove; J. L. Whitbeck, Belvidere.

LOT 5—HEREFORDS—HERD.

Herd—Bull 2 years old or over; cow 3 years old or over; heifer 2 years old and under 3; heifer 1 year old and under 2; heifer under 1 year old—1 entry:
Premium, Thos. Clark, Beecher $50 00
Hero 4352; Dutchess 12th 10901; Jessie 2d 10909; Flossie 10915; Gem Wilder 10917.

Awarding Committee—B. F. Montgomery, Petersburg; G. H. Stookey, Belleville; J. G. Green, Tallula.

LOT 6—HEREFORDS—SWEEPSTAKES.

Bull of any age—6 entries:
Premium, Thos. Clark, Beecher $50 00
Hero 4352.

Cow of any age—8 entries:
Premium, Thos. Clark, Beecher $50 00
Peerless.

Awarding Committee—W. W. Gray, Chebanse; Chas. S. Brown, Berlin; T. H. Baker, Davis Junction.

LOT 7—DEVONS.

BULLS.

Bull 3 years old or over—3 entries:
First premium, Younger & Whitmore, Fairbury $25 00
Remus 2118; calved February 15, 1880; bred by L. F. Ross, Avon; sire, Shelto 2d 1114; dam, Orphan Girl 2194.

Second premium, J. W. Morse & Son, Verona, Wis. $15 00
Carlos; calved August 9, 1881; bred by B. F. Peck, East Bethany, N. Y.; sire, Flitton 7th 1490; dam, Cowslip 66.

Bull 2 years old and under 3—1 entry—no award.

Bull 1 year old and under 2—1 entry—no award.

Bull under 1 year old—5 entries:
First premium, Younger & Whitmore, Fairbury 15 00
Malcolm; calved March 20, 1884; bred by Wm. Younger, Fairbury; sire, Remus 2118; dam, Lady May 2d 1759.
Second premium, J. W. Morse & Son, Verona, Wis. 10 00
Madison Boy; calved April 3, 1884; bred by J. W. Morse & Son, Verona, Wis.; sire, Carlos 2013; dam, Gypsy 3057.

COWS.

Cow 4 years old or over—8 entries:
First premium, Younger & Whitmore, Fairbury $25 00
Lady May 2d 1759; calved March 7, 1874; bred by D. C. May, Rochelle; sire, Hamilton 645; dam, Lady May 1758.
Second premium, Younger & Whitmore, Fairbury 15 00
Roxy 3840; calved May 25, 1880; bred by Wm. Younger, Fairbury; sire, Colonel Ryan 410; dam, Lady May 2d 1759.

Cow 3 years old and under 4—3 entries:
First premium, J. W. Morse & Son, Verona, Wis. 25 00
Venie; calved April, 1881; bred by J. W. Morse & Son, Verona, Wis.; sire, Seventy-Six 1109; dam, Jessie 2d 1604.

Heifer 2 years old and under 3—4 entries:
First premium, Younger & Whitmore, Fairbury 25 00
Chloe Pearl 4910; calved March 1, 1882; bred by Wm. Younger, Fairbury; sire, Remus 2118; dam, Pearl 2213.
Second premium, J. W. Morse & Son, Verona, Wis 15 00
Full Blood Beauty; calved April, 1882; bred by J. W. Morse & Son, Verona, Wis.; sire, Belty 2d 292; dam, Full Blood 1322.

Heifer 1 year old and under 2—5 entries:
First premium, Younger & Whitmore, Fairbury 20 00
Lady Mack 4911; calved December 15, 1882; bred by Wm. Younger, Fairbury; sire, Remus 2118; dam, Roxy 3840.
Second premium, Younger & Whitmore, Fairbury 10 00
Kerenhappuch 4683; calved January 16, 1883; bred by D. J. Whitmore, Canton, O.; sire, Barefoot 272; dam, Winnie 2700.

Heifer under 1 year old—5 entries:
First premium, J. W. Morse & Son, Verona, Wis. 15 00
Chicago Girl; calved April, 1884; bred by J. W. Morse & Son, Verona, Wis.; sire, Carlos 2013; dam, Pussy 3970.
Second premium, J. W. Morse & Son, Verona, Wis 10 00
Jessie Queen; calved May, 1884; bred by J. W. Morse & Son, Verona, Wis.; sire, Carlos 2013; dam, Jessie 2d 1604.

Awarding Committee—Lawrence McDonald, Pecatonica; B. G. Lee, Kankakee; J. H. Quinn, Toulon.

LOT 8—DEVONS—HERD.

Herd—Bull 2 years old or over; cow 3 years old or over; heifer 2 years old and under 3; heifer 1 year old and under 2; heifer under 1 year old—3 entries:
Premium, Younger & Whitmore, Fairbury $50 00
Remus 2118; Lady May 2d 1759; Chloe Pearl 4910; Kerenhappuch 4683; Camroy.

Awarding Committee—E. F. Rush, Perry; Wm. Brown, Berlin; D. C. May, Rochelle.

LOT 9—DEVONS—SWEEPSTAKES.

Bull any age—4 entries:
Premium, J. W. Morse & Son, Verona, Wis $50 00

Cow any age—8 entries:
Premium, Younger & Whitmore, Fairbury 50 00
Roxy, 3840.

***Awarding Committee*—Thos. Bidwell, Gurne; Chas. S. Brown, Berlin; T. H. Baker, Davis Junction.**

LOT 10—POLLED ANGUS.

BULLS.

Bull 3 years old or over—1 entry:
First premium, Anderson & Findlay, Lake Forest $25 00
Basuto 1820; calved Feb. 16, 1880; bred by Sir G. M. Grant, Scotland; sire, Editor 1460; dam, Blackbird of Corskie 3d 3766.

Bull 2 years old and under 3—3 entries:
First premium, Anderson & Findlay, Lake Forest 25 00
Rioter 3180; calved April 4, 1882; bred by John Grant, Scotland; sire, Knight of Garter 1763; dam, Bonny Bee 5339.
Second premium, Anderson & Findlay, Lake Forest 15 00
Allan of Montbletton 2449.

Bull 1 year old and under 2—2 entries:
First premium, Anderson & Findlay, Lake Forest 20 00
Chancellor 2609; calved Feb. 17, 1883; bred by John Strachan, Scotland; sire, Editor 1460; dam, Coquette 4th 3497.
Second premium, Anderson & Findlay, Lake Forest 10 00
Angelo 3344.

Bull under 1 year old—2 entries:
First premium, Anderson & Findlay, Lake Forest 15 00
Jupiter of Lake Forest; calved Oct. 7, 1883; bred by Anderson & Findlay, Lake Forest; sire, Ballindalloch of Lake Forest 1951; dam, Darling of Lake Forest 5115.

COWS.

Cow 4 years old over—4 entries:
First premium, Anderson & Findlay, Lake Forest $25 00
Coquette 4th 3497; calved March 7, 1877; bred by Robert Walker, Scotland; sire, Rory O'More 844; dam, Coquette 3d 1402.
Second premium, Anderson & Findlay, Lake Forest 15 00
Lady Wilfrid 3818; calved Jan. 22, 1878; bred by Robert Walker, Scotland; sire, Sir Wilfrid 1157; dam, Jane of Corskie 3011.

Cow 3 years old and under 4—4 entries:
First premium, Anderson & Findlay, Lake Forest 25 00
Banshee 4th 5583; calved Feb. 24, 1881; bred by Sir W. G. Cumming, Scotland; sire, Black Watch 1242; dam, Banshee 2981.
Second premium, Anderson & Findlay, Lake Forest 15 00
Rosaline 5136; calved March 23, 1881; bred by James Smith, Scotland; sire, Black Standard 1541; dam, Emma 2d of A. 6059.

Heifer 2 years old and under 3—4 entries.
First premium, Anderson & Findlay, Lake Forest 25 00
Walnut 2d 7849; calved Feb. 21, 1882; bred by J. Strachan, Scotland; sire, Editor 1460; dam, Walnut 3840.
Second premium, Anderson & Findlay, Lake Forest 15 00
Princess Alicia 7844; calved May 2, 1822; bred by J. Strachan, Scotland; sire, Editor 1460; dam, Dawson 3835.

Heifer 1 year old and under 2—5 entries;
First premium, Anderson & Findlay, Lake Forest 20 00
Lilly 3d 7842; calved Nov. 30, 1882; bred by J. Strachan, Scotland; sire, Editor 1460; dam, Lilly 2d 4309.
Second premium, Anderson & Findlay, Lake Forest 10 00
Queen of M. 2d 7846; calved Feb. 6, 1883; bred by J. Strachan, Scotland; sire, Editor 1460; dam, Queen Bee 4830.

Heifer under 1 year old—2 entries:
First premium, Anderson & Findlay, Lake Forest 15 00
Lady Ideal; calved Nov. 23, 1883; bred by Anderson & Findlay, Lake Forest; sire, Basuto 1820; dam, Lady Wilfrid 3818.
Second premium, Anderson & Findlay, Lake Forest 10 00
Cyclone; calved Feb. 17, 1884; bred by Anderson & Findlay, Lake Forest; sire, Lord Iden 2956; dam, Coquette 4th 3497.

Awarding Committee—J. G. Willard, Harristown; Jno. M. Pearson, Godfrey; E. W. Thompson, Sugar Grove; D. C. May, Rochelle.

LOT 11—POLLED ANGUS—HERDS.

Herd—Bull 2 years old or over; cow 3 years old or over; heifer 2 years old and under 3; heifer 1 year old and under 2; heifer under 1 year old—1 entry:
Premium, Anderson & Findlay, Lake Forest $50 00
Basuto 1820; Coquette 4th 3497; Princess Alicia 7844; Lilly 3d 7842; Lady Ideal.

Awarding Committee—Robert Otley, Kewanee; Lawrence McDonald, Pecatonica.

LOT 12—POLLED ANGUS—SWEEPSTAKES.

Bull any age—3 entries:	
Premium, Anderson & Findlay, Lake Forest	$50 00
Basuto 1820.	
Cow or Heifer any age—3 entries:	
Premium, Anderson & Findlay, Lake Forest	50 00
Coquette 4th 3497.	

Awarding Committee—Thos. Bidwell, Gurne; Chas. S. Brown, Berlin; T. H. Baker, Davis Junction.

LOT 13—HOLSTEINS OR FRIESIANS.

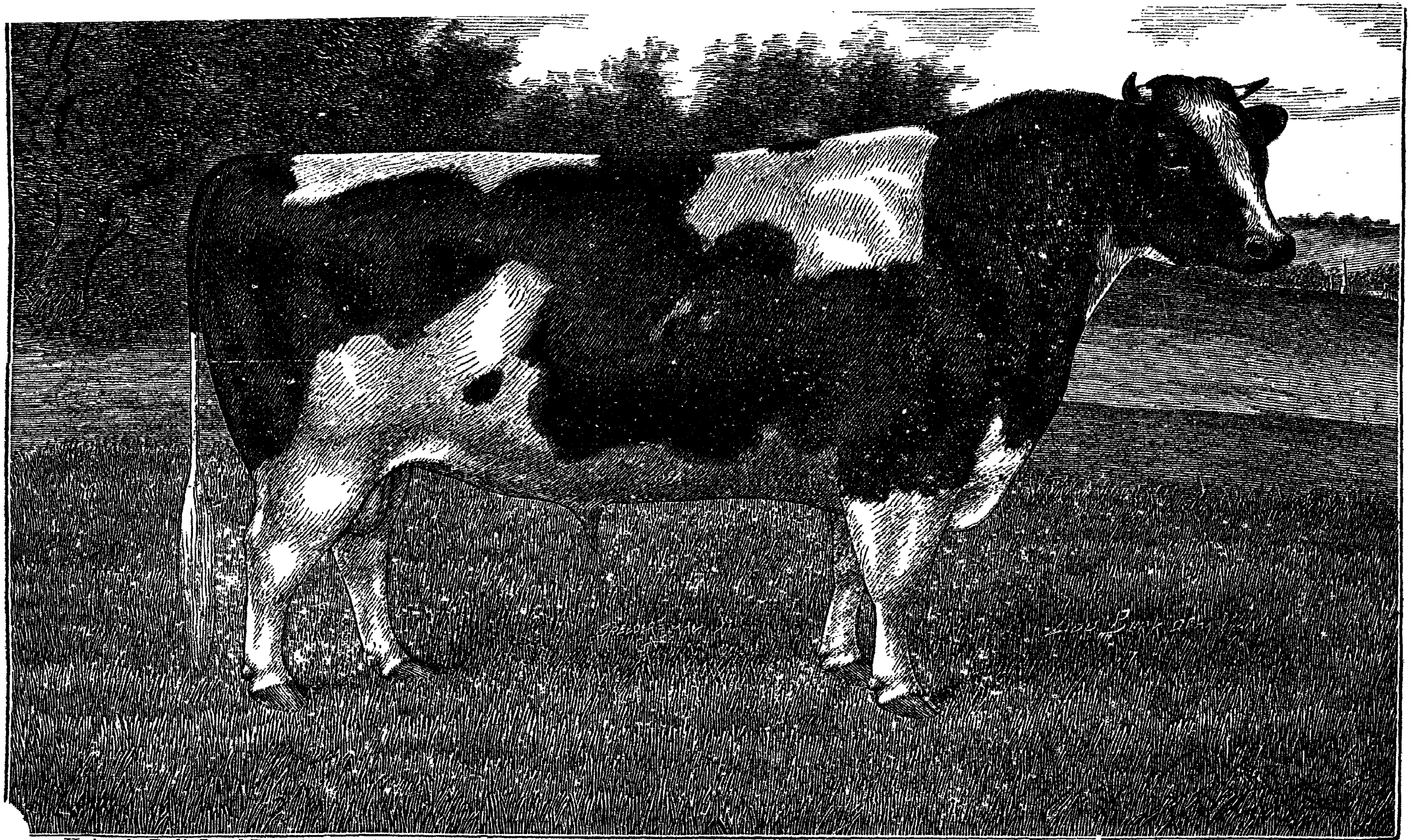
BULLS.

Bull 3 years old or over—4 entries:	
First premium, G. M. Emrick, Chicago	$25 00
Fritz Hartog; calved Feb. 19, 1880; bred by G. M. Emrick, Brookville; sire, Paul Potter 2d; dam, Aaggie Hartog.	
Second premium, S. S. Mann, Elgin	15 00
Jan Wit 2524 (251); calved March 14, 1881; bred by I. O. Wydenes, Midwoud, Holland; sire, Jacob 2d 56; dam, Arnie 1005.	
Bull 2 years old and under 3—1 entry:	
First premium, G. M. Emrick, Chicago	25 00
Ids Bruinsma; calved March 25, 1882; bred by G. M. Emrick, Brookville; sire, Mood 26; dam, Tetje Bruinsma.	
Bull 1 year old and under 2—4 entries:	
First premium, S. S. Mann, Elgin	20 00
Sanboer; calved April 20, 1883; bred by V. Bakker, Weiringerwaard, Holland; sire, Wm. 2d 173; dam, Blye.	
Second premium, Geo. E. Brown & Co., Aurora	10 00
Vantiel; calved 1883; imported.	
Bull under 1 year old—9 entries:	
First premium, Geo. E. Brown & Co., Aurora	15 00
Sir Joseph; calved Jan. 5, 1884; bred by Geo. E. Brown & Co., Aurora; sire, Byron 1101; dam, Minerva 976.	
Second premium, S. S. Mann, Elgin	10 00
Manodine Prince 2732; calved March 8, 1884; bred by Jan Man, Beemster, North Holland; sire, Artis (127); dam, Manodine 4967 (521).	

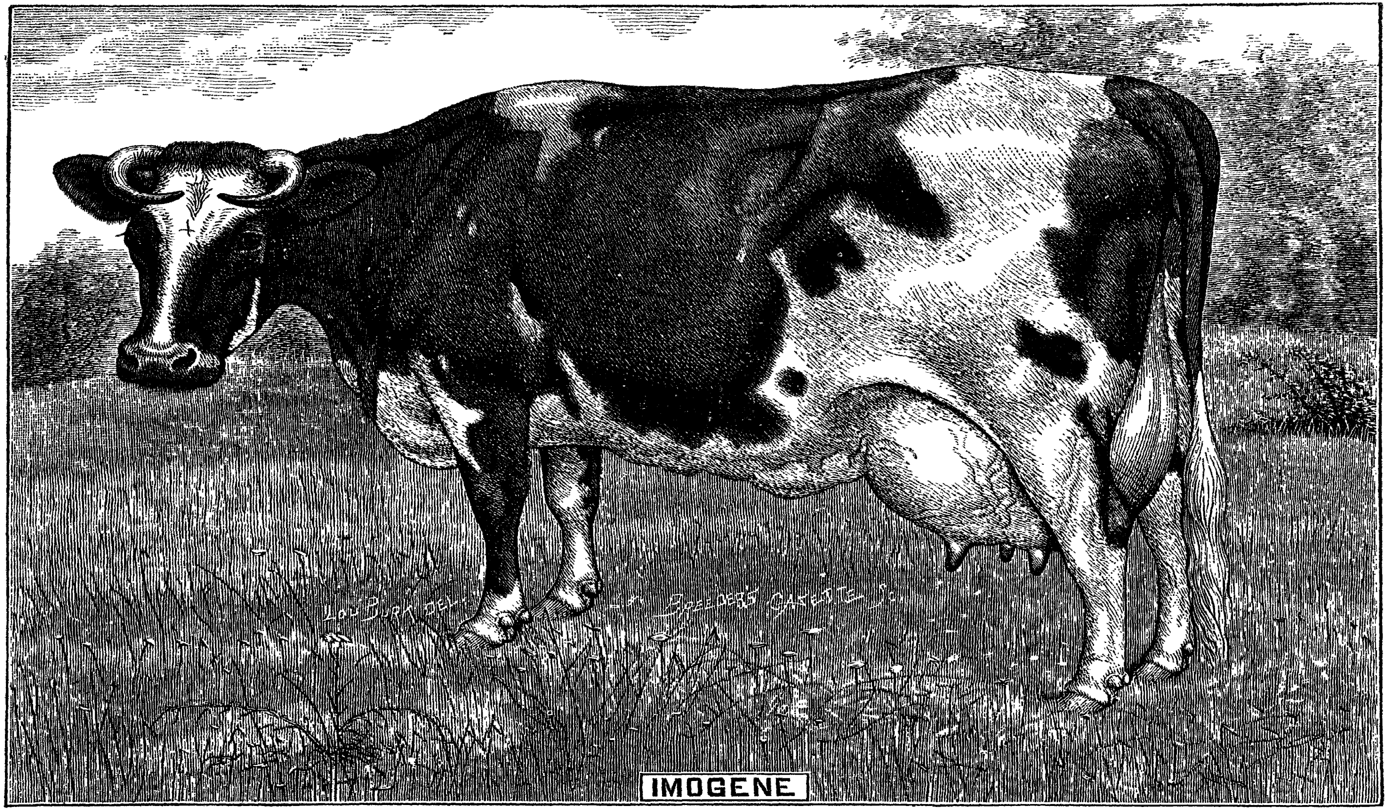
COWS.

Cow 4 years old or over—6 entries:	
First premium, Geo. E. Brown & Co., Aurora	$25 00
Louvair 786; calved 1877; imported.	
Second premium, S. S. Mann, Elgin	15 00
Davina 6670 (1273); calved March 10, 1878; bred by D. C. Coopman, Midwoud, Holland; sire, Dist. Bull of Hein; dam, Davina.	
Cow 3 years old and under 4—5 entries:	
First premium, Geo. E. Brown & Co., Aurora	25 00
Susie Clay 1590; calved 1881; bred by W. A. Russell, Lawrence, Mass.	
Second premium, S. S. Mann, Elgin	15 00
Lady Bismark 4654; calved March 10, 1881; bred by C. Winkel, Sybearspee, Holland; sire, Dist. Bull; dam, Bismark.	
Heifer 2 years old and under 3—5 entries:	
First premium, Geo. E. Brown & Co., Aurora	25 00
Tyrola 5961; calved 1882; imported.	
Second premium, G. M. Emrick, Chicago	15 00
Littenser; calved April 5, 1882; imported.	
Heifer 1 year old and under 2—6 entries:	
First premium, G. M. Emrick, Chicago	20 00
Hutokee B.; calved Feb. 11, 1883; imported in dam; sire, Friesian Bull; dam, Hendrikje 565.	
Second premium, Geo. E. Brown & Co., Aurora	10 00
Alpena; calved Nov. 1883; bred by Geo. E. Brown & Co., Aurora; sire, John Clay; dam, Louvair 786.	
Heifer under 1 year old—5 entries:	
First premium, Geo. E. Brown & Co., Aurora	15 00
Magnolia; calved 1884; imported in dam; dam, Fleur de Lis 1590.	
Second premium, Geo. E. Brown & Co., Aurora	10 00
Nettie Clay; calved 1884; bred by Geo. E. Brown & Co., Aurora; sire, Byron 1101; dam, Susie Clay.	

Awarding Committee—John M. Pearson, Godfrey; B. G. Lee, Manteno; Lawrence McDonald, Pecatonica.



Holstein Bull, Lord Benningbrock 2523, (256), exhibited by S. S. Mann, Elgin, Ill. Awarded Sweepstakes Premium State Fair, 1884.—p. 42.



Holstein Cow. Imogene 333, exhibited by S. S. Mann, Elgin, Ill. Awarded Sweepstakes Premium, State Fair, 1884—p. 43.

LOT 14—HOLSTEIN OR FRIESIAN—HERD.

Herd—Bull 2 years old or over; cow 3 years old or over; heifer 2 years old and under 3; heifer 1 year old and under 2; heifer under 1 year old—4 entries:
Premium, S. S. Mann, Elgin.. $50 00
Jan Wit; Imogene; Pride of Eden; Huberta; Elgin Girl 2d.

Awarding Committee—George W. Levings, Rockford, William H. Bois, Cherry Valley; George W. Sterling, Belvidere.

LOT 15—HOLSTEIN OR FRIESIAN—SWEEPSTAKES.

Bull any age—6 entries:
Premium, S. S. Mann, Elgin.. $50 00
Lord Benningbrock 2523 (256); calved March 10, 1881; bred by E. P. Spaans, Midwoud, Holland; sire, Napoleon (182); dam, Minco.

Cow or Heifer any age—6 entries:
Premium, S. S. Mann, Elgin.. 50 00
Imogene 333; calved 1875; bred by A. De Gode, Purmer, North Holland; imported.

Awarding Committee—D. C. May, Rochelle; T. H. Baker, Davis Junction; Joseph Tefft, Elgin.

LOT 16—JERSEY—NO ENTRY.

LOT 17—JERSEY—HERD—NO ENTRY.

LOT 18—JERSEY—SWEEPSTAKES—NO ENTRY.

LOT 19—AYRSHIRE.

BULLS.

Bull 3 years old or over—1 entry.
First premium, John Stewart, Blackberry.. $25 00
Duke of Illinois; calved December 18, 1880; bred by John Stewart, Blackberry; sire, Grant 2284; dam, Lady Jane 2666.

Bull 2 years old and under 3—1 entry.
First premium, John Stewart, Blackberry.. 25 00
Ayrshire Lad; calved April 3, 1881; bred by John Stewart, Blackberry; sire, Baron of Buclivia; dam, Pride of Lochern.

Bull 1 year old and under 2—1 entry:
First premium, John Stewart, Blackberry.. 20 00
Jean Val Jean; calved March 15, 1883; bred by John Stewart, Blackberry; sire, Lincoln 2285; dam, Ayrshire Ellen 4890.

Bull under 1 year old—1 entry:
First premium, John Stewart, Blackberry.. 15 00
Garfield; calved Sept. 28, 1883; bred by John Stewart, Blackberry; sire, Lincoln 2285; dam, Spotty Grant 4900.

COWS.

Cow 4 years old or over—4 entries:
First premium, John Stewart, Blackberry.. $25 00
Flora Grant 4892; calved Sept. 9, 1878; bred by John Stewart, Blackberry; sire, Grant 2284; dam, Blackberry Maid 4891.
Second premium, John Stewart, Blackberry.. 15 00
Isabel 2d, 4894; calved March 13, 1876; bred by John Stewart, Blackberry; sire, Geo. 3d 1154; dam, Isabel 2524.

Cow 3 years old and under 4—1 entry:
First premium, John Stewart, Blackberry.. 25 00
Maid of Compton 6463; calved Oct. 29, 1880; bred by John Stewart, Blackberry; sire, Lincoln 2285; dam, Blackberry Maid 4891.

Heifer 2 years old and under 3—1 entry:
First premium, John Stewart, Blackberry $25 00
Fanny Fern.

Heifer 1 year old and under 2—2 entries:
First premium, John Stewart, Blackberry 20 00
Evangeline; calved April 2, 1883; bred by John Stewart, Blackberry; sire, Lincoln 2285.
Second premium, John Stewart, Blackberry 10 00
Mrs. Langtry; calved May 15, 1883; bred by John Stewart, Blackberry; sire, Lincoln 2285; dam, Isabel 4th 4896.

Heifer under 1 year old—1 entry:
First premium, John Stewart, Blackberry 15 00
Belle of Compton; calved Jan. 14, 1884; bred by John Stewart, Blackberry; sire, Duke of Illinois 2959; dam, Ayrshire Belle.

Awarding Committee—A. A. Klove, Leland; J. G. Willard, Harristown; S. H. Wylie, Minonk.

LOT 20—AYRSHIRE—HERD.

Herd—Bull 2 years old or over; cow 3 years old or over; heifer 2 years old and under 3; heifer 1 year old and under 2, heifer under 1 year old—1 entry:
First premium, John Stewart, Blackberry $50 00
Duke of Illinois; Flora Grant; Fanny Fern; Evangeline; Belle of Compton.

Awarding Committee—A. A. Klove, Leland; B. G. Lee, Manteno.

LOT 21—AYRSHIRE—SWEEPSTAKES.

Bull any age—1 entry:
Premium, John Stewart, Blackberry $50 00
Duke of Illinois.

Cow or Heifer any age—4 entries:
Premium, John Stewart, Blackberry 50 00
Flora Grant.

Awarding Committee—Joseph Tefft, Elgin; C. H. Larkin, Clintonville.

LOT 22—HERD—SWEEPSTAKES.

BEEF BREEDS.

Herd—Bull 2 years old or over; cow 3 years old or over; heifer 2 years old and under 3; heifer 1 year old and under 2; heifer under 1 year old—4 entries:
First premium, Robert Miller, West Liberty, Ia. $300 00
Scotland's Pride; Abbie Oxford; Beautie's Pride; Rose of Honor; Maud.
Second premium, Anderson & Findlay, Lake Forest 125 00
Basuto 1820; Princess Alicia 7844; Lilly 3d 7842; Ideal.
Third premium, Thos. Clark, Beecher 75 00

Awarding Committee—J. G. Greene, Tallula; J. L. Whitbeck, Belvidere; Thos. Bidwell, Gurne.

LOT 23—YOUNG HERD—SWEEPSTAKES.

BEEF BREEDS.

Herd—Bull and 4 Heifers of same breed, under 2 years of age—5 entries:
First premium, Thos. Clark, Beecher $100 00
Fanboy 2d 7613; Flossie 10915; Lovely 10966; Jessie 3d 10908; Empress 2d.
Second premium, Robt. Miller, West Liberty, Ia. 50 00
Young Commander; Rosebud 31st; Rose of Honor; Butterfly of Oakland; Maud.
Third premium, Anderson & Findlay, Lake Forest 25 00
Chancellor 2909; Lilly 3d 7842; Queen of Montcoffer 2d 7846; Lady Ideal; Cyclone.

Awarding Committee.—D. C. May, Rochelle; Jonathan W. Perriam; Chicago; C. H. Rice, Waukegan.

LOT 24—HERD—SWEEPSTAKES.

MILK BREEDS.

Herd—Bull 2 years old or over; cow 3 years old or over; heifer 2 and under 3 years; heifer 1 and under 2 years; heifer under 1 year—7 entries:

First premium, S. S. Mann, Elgin $300 00
Jan Wit; Davina; Pride of Edam; Huberta; Elgin Girl 2d.
Second premium, S. S. Mann, Elgin 125 00
Lord Benningbrock; Lady Catherine; Elgin Beauty; Nettie Wortel; Elgin Maid 2d.
Third premium, J. W. Morse & Son, Verona, Wis 75 00

Awarding Committee—Cyrus Jones, San Jose, Cal.; James Truman, Bloomington; J. H. Spears, Tallula.

CLASS B—HORSES.

E. C. LEWIS, *Superintendent*.

LOT 25—THOROUGHBRED.

STALLIONS.

Stallion 4 years old or over—3 entries:

First premium, Wiley Buckles, Champaign $25 00
Harkaway; foaled 1873; bred by Gen. Buford, Ky.; sire, Inquirer; dam, Eurick.
Second premium, Wiley Buckles, Champaign 15 00
London; foaled 1879; bred by F. H. Constable, Eng.; sire, Lowlander; dam, Bracelet.

Stallion 3 years old and under 4—No entry.

Stallion 2 years old and under 3—No entry.

Stallion 1 year old and under 2—No entry.

Stallion Colt under 1 year old—No entry.

MARES.

Mare 4 years old or over—8 entries:

First premium, Wiley Buckles, Champaign $25 00
Baybee; foaled 1878; bred by Wiley Buckles, Champaign; sire, Billett, Imp; dam, Lizzie Vic.
Second premium, Wiley Buckles, Champaign 15 00
Amazette; foaled 1880; bred by Wiley Buckles, Champaign; sire, Harkaway; dam, Lizzie Vic.

Mare 3 years old and under 4—No entry.

Mare 2 years old and under 3—No entry.

Mare 1 year old and under 2—4 entries:

First premium, Wiley Buckles, Champaign 15 00
Carrie; foaled 1883; bred by Wiley Buckles, Champaign; sire, Harkaway; dam, Lizzie Vic.
Second premium, Wiley Buckles, Champaign 10 00
Alma; foaled 1883; bred by Wiley Buckles, Champaign; sire, Harkaway; dam, Kate O'Brien.

Mare Colt under 1 year old—4 entries:

First premium, Wiley Buckles, Champaign 15 00
Lily; foaled 1884; bred by Wiley Buckles, Champaign; sire, Harkaway; dam, Lizzie Vic.
Second premium, Wiley Buckles, Champaign 10 00
Minnie; foaled 1884; bred by Wiley Buckles, Champaign; sire, Harkaway; dam, Sue Light.

BREEDING RINGS.

Brood Mare as shown by two of her colts, either sex, under 4 years old—1 entry:

Premium, Wiley Buckles, Champaign $50 00
Lizzie Vic; foaled 1868; bred by W. R. A. Lewis, Kentucky; sire, Uncle Vic; dam, Maggie.

Breeding Stallion as shown by 5 of his colts, either sex, under 4 years old—1 entry:
Premium, Wiley Buckles, Champaign..$100 00
Harkaway.

Awarding Committee—J. H. Patteson, Morris; J. B. Felker, Amboy; R. Bullock, Tonica.

LOT 26—THOROUGHBRED—SWEEPSTAKES.

Stallion any age—2 entries.
Premium, Wiley Buckles, Champaign..$100 00
London.

Mare any age—5 entries.
Premium, Wiley Buckles, Champaign..50 00
Sue Light; foaled 1873; bred by Wiley Buckles, Champaign; sire, Bonnie Scotland; dam, Lizzie Vic.

LOT 27—ROADSTERS.

STALLIONS.

Stallion 4 years old or over—14 entries:
First premium, Thos. W. Chandler, Chicago..$25 00
Brown Wilks; foaled 1877; sire, Geo. Wilks; dam, Jenny Irving.
Second premium, J. C. McFerran, Louisville, Ky..15 00
Pancoast; foaled May 3, 1877; bred by A. J. Alexander, Woodburn Farm, Ky.; sire, Woodford Mambrino; dam, Bicara.

Stallion 3 years old and under 4—3 entries:
First premium, John Newman, Elgin..20 00
Young Lakeland; foaled June 25, 1881; bred by John Newman, Elgin; sire, Lakeland Abdallah; dam, Hilferty's Patchen.
Second premium, Y. D. Scales, Jacksonville..20 00
Robt. Runner; foaled May, 1881; bred by Robt. Runner, Glasgow; sire, Almont Forest 2863.

Stallion 2 years old and under 3—8 entries:
First premium, Y. D. Scales, Jacksonville..20 00
Jim Crane; foaled May 30, 1882; bred by A. G. Danforth, Washington; sire, Fairy Gift; dam, Nellie.
Second premium, Wm. Emmett, Chicago..10 00

Stallion 1 year old and under 2—7 entries:
First premium, Y. D. Scales, Jacksonville..15 00
Diatonic 2763; foaled May 29, 1883; bred by A. G. Danforth, Washington; sire, Fairy Gift; dam, Nellie.
Second premium, J. W. Fisher, Quincy..10 00
Nutbreaker; foaled January 28, 1883; bred by J. C. McFerran, Louisville, Ky.; sire, Nutwood 600; dam, Bonny Doon.

Stallion Colt under 1 year old—6 entries:
First premium, Caton Stock Farm, Joliet..15 00
Woodford Cossack; foaled 1884; bred by Caton Stock Farm, Joliet; sire, Don Cossack 980; dam, Louisville Maid.
Second premium, Caton Stock Farm, Joliet..10 00
Alta Cossack; foaled 1884; bred by Caton Stock Farm, Joliet; sire, Don Cossack 980; dam, Misnomer.

MARES.

Mare 4 years old or over—8 entries:
First premium, John Castleman, Chicago..$25 00
Silver Leaf.
Second premium, George Smith, Chicago..15 00

Mare 3 years old and under 4—7 entries:
First premium, J. C. McFerran, Louisville, Ky..20 00
Issaqueena; foaled April 26, 1881; bred by J. C. McFerran, Louisville, Ky.; sire, Pancoast; dam, Latham Lass.
Second premium, Caton Stock Farm, Joliet..10 00
Maggie Cossack; foaled 1881; bred by Caton Stock Farm, Joliet; sire, Don Cossack; dam, McAtee Mare

Mare 2 years old and under 3—4 entries:
First premium, Caton Stock Farm, Joliet.......... $20 00
Cossack Maid; foaled 1883; bred by Caton Stock Farm, Joliet; sire, Don Cossack; dam, Louisville Maid.
Second premium, Caton Stock Farm, Joliet.......... 10 00
Jeanette; foaled 1883; bred by Caton Stock Farm, Joliet; sire, Don Cossack; dam, Lottie.

Mare 1 year old and under 2—6 entries:
First premium, J. C. McFerran, Louisville, Ky.......... 15 00
Alcea; foaled February 16, 1883; bred by J. C. McFerran, Louisville, Ky.; sire, Nutwood; dam, Lady Alice.
Second premium, J. C. McFerran, Louisville, Ky.......... 10 00
Nemesis; foaled February 20, 1883; bred by J. C. McFerran, Louisville, Ky.; sire, Nutwood; dam, Fourlines.

Mare Colt under 1 year old—1 entry:
First premium, Caton Stock Farm, Joliet.......... 15 00
Cossack Lass; foaled 1884; bred by Caton Stock Farm, Joliet; sire, Don Cossack; dam, Louisville Maid.

BREEDING RINGS.

Brood Mare, as shown by 2 of her colts, either sex, under 4 years old—2 entries:
Premium, Caton Stock Farm, Joliet.......... $50 00
Louisville Maid.

Breeding Stallion, as shown by 5 of his colts, either sex, under 4 years of age—2 entries:
Premium, Caton Stock Farm, Joliet.......... 100 00
Don Cossack; foaled 1876; bred by J. C. McFerran & Co., Louisville, Ky.; sire, August Belmont; dam, Latham Lass.

Awarding Committee—S. H. Sweet, Chicago; Henry Colwell, ——————; D. E. Beaty, Jerseyville.

LOT 28—ROADSTERS—SWEEPSTAKES.

Stallion any age—28 entries:
Premium, J. C. McFerran, Louisville, Ky.......... $100 00
Nutwood; foaled May 1, 1870; bred by A. J. Alexander, Woodburn Farm, Ky.; sire, Belmont; dam, Miss Russell.

Mare any age—17 entries:
Premium, J. C. McFerran, Louisville, Ky.......... 50 00
Alcea.

Awarding Committee—William H. Piatt, Monticello; W. H. Crum, Liter; J. H. Bacon, Wever, Ia.

LOT 29—NORMAN, PERCHERON.

STALLIONS.

Stallion 4 years old or over—30 entries:
First premium, Dillon Bros, Normal.......... $25 00
Leisure B. 467; foaled 1880; bred by Dillon Bros, Normal; sire, St. Laurent 753; dam, Evalina 3493.
Second premium, Ed. Hodgson, El Paso.......... 15 00
Boulogne 1119; foaled 1878; imported.

Stallion 3 years old and under 4—13 entries:
First premium, Dillon Bros., Normal.......... 20 00
Coco B. 1161; foaled 1881; bred by Dillon Bros., Normal; sire, Sarthe 767; dam, Boquet 879.
Second premium, Degen Bros., Ottawa.......... 10 00
Godichow; foaled 1881; imported May, 1884, by Degen Bros., Ottawa.

Stallion 2 years old and under 3—8 entries:
First premium, Dillon Bros., Normal.......... 20 00
Boccaccio 2424; foaled 1882; imported.
Second premium, Virgin & Co., Fairbury.......... 10 00
Utah 1572; foaled Jan. 1882, imported.

Stallion 1 year old and under 2—2 entries:
First premium, Dillon Bros., Normal........ $15 00
Bonus 2171; foaled 1883; bred by Dillon Bros., Normal; sire, Dr. Dee; dam, Modesty 998.
Second premium, Virgin & Co., Fairbury........ 10 00
Montana 2328; foaled May, 1883, imported.

Stallion Colt under 1 year old—2 entries:
First premium, Dillon Bros., Normal........ 15 00
Bucephalus 2733; foaled May, 1884; bred by Dillon Bros., Normal; sire, Bellair 1094; dam, Chickory 1649.
Second premium, Ed Hodgson, El Paso........ 10 00
None Such; foaled May 20, 1884; bred by Ed Hodgson, El Paso; sire, Boulogne 1119; dam, Celeste 1642,

MARES.

Mare 4 years old or over—6 entries:
First premium, Dillon Bros., Normal........ 25 00
Modesty G. 998; foaled 1876; bred by Dillon Bros., Normal; sire, St. Laurent 753; dam, Gertrude 943.
Second premium, H. I. Messenger, Lockport........ 15 00
La Belle France 2005.

Mare 3 years old and under 4—3 entries:
First premium, Dillon Bros., Normal........ 20 00
Ida Volgara 1705; foaled 1881; imported.
Second premium, Ed Hodgson, El Paso........ 10 00
Celeste 1642; foaled 1881; imported.

Mare 2 years old and under 3—2 entries:
First premium, Ed Hodgson, El Paso........ 20 00
Maggiore 1919; foaled 1882; imported.
Second premium, Dillon Bros., Normal........ 10 00
Marie 2782; foaled 1882; imported.

Mare 1 year old and under 2—1 entry:
First premium, Dillon Bros., Normal, Ill........ 15 00
Linnet B. 2176; foaled 1883; bred by Dillon Bros., Normal; sire Leisure B. 467; dam, Cullalee 915.

Mare Colt under 1 year old—no entry.

BREEDING RINGS.

Brood Mare as shown by 2 of her colts, either sex, under 4 years old—no entry:

Breeding Stallion as shown by 5 of his colts, either sex, under 4 years old—1 entry.
First premium, Ed Hodgson, El Paso........ $100 00
Boulogne 1119.

Awarding Committee—Eli Harvey, Sibley; A. E. Kincaid, Vandalia, Mo.; Jacob Miller, Millbourn.

LOT 30—NORMAN, PERCHERON—SWEEPSTAKES.

Stallion any age—34 entries:
Premium, Dillon Bros., Normal........ $100 00
Leisure B. 467.

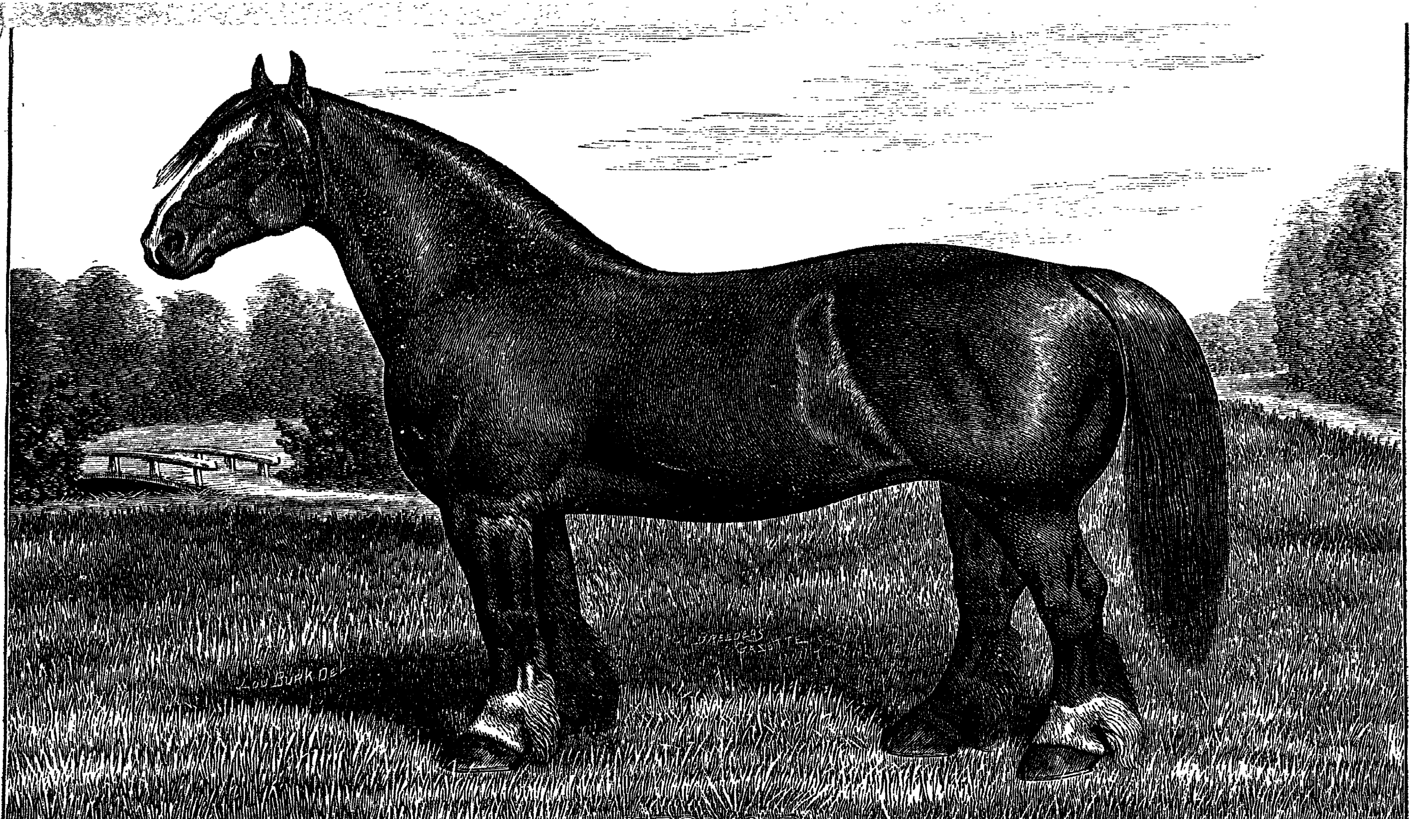
Mare any age—10 entries:
Premium, Dillon Bros., Normal........ 50 00
Modesty G. 998.

Awarding Committee—A. J. Rogers, Sublette; E. A. Vittum, Canton.

LOT 31—CLYDESDALE AND ENGLISH DRAFT BREEDS.

STALLIONS.

Stallion 4 years old or over—30 entries:
First premium, Conrad Zimmerman, Lostant........ $ 25 00
Beaconsfield 2d 2529; foaled 1876; bred by R. K. Porter, Hillron, Cambridgeshire, England; sire, Lord Beaconsfield (115); dam, Countess the Younger.
Second premium, R. Ogden & Son, Cameron........ 15 00
Marquis (717); foaled April 28, 1880; sire, Baron Renfrew (37); dam, Kate.



LEOLINE

Clydesdale Mare, Leoline (695); exhibited by Door Village Live Stock Association, Door Village, Ind. Awarded Sweepstakes Premium; State Fair, 1884.—p 49.

Stallion 3 years old and under 4—22 entries:

First premium, Thomas Paterson, Farm Ridge	$20 00
Ben Lomond.	
Second premium, Burgess Bros., Wenona	10 00
Tel-el-Kebir; foaled 1881; sire, Waterloo (2262); dam, by Lucky Boy (1432).	

Stallion 2 years old and under 3—37 entries:

First premium, Robert Holloway, Alexis	20 00
Cadwallow 1430; foaled June 8, 1882; bred by A. & L. Cecil, Orchardmains, Scotland; sire, Druid 654; dam, Lily of Orchardmains (485).	
Second premium, Robert Holloway, Alexis	10 00
McCallum 1434; foaled May 12, 1882; bred by Wm. Hood, Chapelton, Scotland; sire, Macgregor (1487); dam, Rosie (543).	

Stallion 1 year old and under 2—13 entries:

First premium, Wm. Moffatt & Bro., Paw Paw	15 00
Contender 2065; foaled April 18, 1883; sire, Apollo 255 (1306); dam, Darling 9th 253.	
Second premium, Robt. Holloway, Alexis	10 00
Prince Wales Yet 2131.	

Stallion Colt under 1 year old—5 entries:

First premium, H. A. Treadwell, Elgin	15 00
Earl of Eglington 2122; foaled June 6, 1884; bred by H. A. Treadwell, Elgin; sire, Glencoe 158; dam, Maggie Patchen.	
Second premium, Robt. Holloway, Alexis	10 00
Prince of Danley 2134.	

MARES.

Mare 4 years old or over—19 entries:

First premium, J. & C. Huston, Blandinsville	$25 00
Cherry Ripe.	
Second premium, Robt. Holloway, Alexis	15 00
Rose of Wigton 695; foaled May 12, 1878; bred by Thomas Gifford, Wigtonshire, Scotland; sire, Warrior 756 (902); dam, Maggie.	

Mare 3 years old and under 4—12 entries:

First premium, Wm. Moffatt & Bro., Paw Paw	20 00
March Beauty; foaled 1881; bred by Samuel Randall, Cambridgeshire, Eng.; sire, Champion.	
Second premium, Robert Holloway, Alexis	10 00
Black Darling 674; foaled May 22, 1881; bred by John M. Martin, Cardross, Scotland; sire, The Abbott 659 (1320); dam, Darling (241).	

Mare 2 years old and under 3—15 entries:

First premium, Robt. Holloway, Alexis	20 00
Princess 1569; foaled July 6, 1882; bred by Sam'l McCulloch, Newton-Stewart, Scotland; sire, Blue Ribbon 1860; dam, Jean of Skaith (2624).	
Second premium. Robt. Holloway, Alexis	10 00
Minnie 1612; foaled May 28, 1882; bred by Wm. McLean, Stranraer, Scotland; sire, Lord Lyon 855; dam, Kate of Whitepark (2722).	

Mare 1 year old and under 2—11 entries:

First premium, Robt. Holloway, Alexis	15 00
Queen Anne 2143	
Second premium, A. Z. Blodgett, Waukegan	10 00
Minnie Haney 1056; foaled November 1, 1882; bred by Simon Beattie, Annan, Scotland; sire, Lord Harry 483; dam, Effie Dean 504.	

Mare Colt under 1 year old—11 entries:

First premium, Robt. Holloway, Alexis	15 00
Bay Darling 2140.	
Second premium, Robt. Holloway, Alexis	10 00
Polly Pointsman 2139.	

BREEDING RINGS.

Brood Mare, as shown by 2 of her colts, either sex, under 4 years old—7 entries:

Premium, Wm. Moffatt & Bro., Paw Paw	$50 00
Darling 11th 256.	

Breeding Stallion, as shown by 5 of his colts, either sex, under 4 years old—3 entries:

Premium, R. Ogden & Son, Cameron	100 00
Marquis 717; foaled April 28, 1880; sire, Baron Renfrew (37); dam, Kate.	

Awarding Committee—R. W. Stubblefield, Bloomington; Wm. Truman, Mendota; B. F. Pickrell, Wheatfield.

LOT 32—CLYDESDALE AND ENGLISH DRAFT BREEDS—SWEEPSTAKES.

Stallion any age—51 entries:	
Premium, Conrad Zimmerman, Lostant	$100 00
Beaconsfield 2529.	
Mare any age—34 entries:	
Premium, Door Village Live Stock Ass'n, Door Village, Ind.	50 00
Leoline (695); foaled 1876; imported.	

Awarding Committee—S. Noble King, Bloomington.

LOT 33—GRADE DRAFT HORSES.

STALLIONS.

Stallion 4 years old or over—7 entries:	
First premium, A. G. Soderbug, Osco	$25 00
Second premium, H. A. Treadwell, Elgin	15 00
Stallion 3 years old and under 4—3 entries:	
First premium, D. Fischer, Goderich, Can.	20 00
Second premium, D. Fischer, Goderich, Can.	10 00
Stallion 2 years old and under 3—14 entries:	
First premium, Abner Strawn, Ottawa	20 00
Second premium, D. Fischer, Goderich, Can.	10 00
Stallion 1 year old and under 2—10 entries:	
First premium, Abner Strawn, Ottawa	15 00
Second premium, R. Ogden & Son, Cameron	10 00
Stallion Colt under 1 year old—6 entries:	
First premium, R. Ogden & Son, Cameron	15 00
Second premium, H. I. Messenger, Lockport	10 00

MARES.

Mare 4 years old or over—8 entries:	
First premium, R. Ogden & Son, Cameron	25 00
Second premium, R. Ogden & Son, Cameron	15 00
Mare 3 years old and under 4—no entry.	
Mare 2 years old and under 3—3 entries:	
First premium, McGregor & McIntosh, Brucefield, Can.	20 00
Second premium, R. Ogden & Son, Cameron	10 00
Mare 1 year old and under 2—7 entries:	
First premium, D. Fischer, Goderich, Can.	15 00
Second premium, D. Fischer, Goderich, Can	10 00
Mare Colt under 1 year old—4 entries:	
First premium, R. Ogden & Son, Cameron	15 00
Second premium, Dillon Bros., Normal	10 00

BREEDING RINGS.

Brood Mare as shown by 2 of her colts, either sex, under 4 years old—5 entries:	
Premium, Ed. Hodgson, El Paso	$50 00
Breeding Stallion as shown by 5 of his colts, either sex, under 4 years old—1 entry:	
Premium, H. A. Treadwell, Elgin	100 00

Awarding Committee—P. A. Armstrong, Morris; W. T. Boyce, Jackson; W. T. Baker, Bolivia.

LOT 34—GRADE DRAFT HORSES—SWEEPSTAKES.

Stallion any age—18 entries:	
Premium, H. I. Messenger, Lockport	$100 00
Mare any age—16 entries:	
Premium, J. B. Ayers, Danvers	50 00

Awarding Committee—Wm. M. Derby, Chicago; Lewis C. Hodgson, Ottawa; J. H. Truman, Bushnell.

Lot 35—Horses for all Work.

STALLIONS.

Stallion 4 years old or over—10 entries:	
First premium, Door Village Live Stock Ass'n, Door Village, Ind.	$25 00
Second premium, G. W. Means, Hersman	15 00
Stallion 3 years old and under 4—6 entries:	
First premium, J. W. Tebo, Mt. Sterling	20 00
Second premium, George Warren & Sons, Fox Lake, Wis	10 00
Stallion 2 years old and under 3—4 entries:	
First premium, George E. Brown & Co., Aurora	20 00
Second premium, George E. Brown & Co., Aurora	10 00
Stallion 1 year old and under 2—4 entries:	
First premium, H. A. Treadwell, Elgin	15 00
Second premium, Door Village Live Stock Ass'n, Door Village, Ind.	10 00
Stallion Colt under 1 year old—2 entries:	
First premium, H. A. Treadwell, Elgin	15 00
Second premium, David Kearns, Wyoming	10 00

MARES.

Mare 4 years old or over—3 entries:	
First premium, David Kearns, Wyoming	25 00
Second premium, H. A. Treadwell, Elgin	15 00
Mare 3 years old and under 4—5 entries:	
First premium, G. W. Means, Hersman	20 00
Second premium, Andrew Armstrong, Beason	10 00
Mare 2 years old and under 3—3 entries:	
First premium, J. L. Coppage, Mt. Sterling	20 00
Second premium, Andrew Armstrong, Beason	10 00
Mare 1 year old and under 2—4 entries:	
First premium, G. W. Means, Hersman	15 00
Second premium, J. B. Stevenson, Virginia	10 00

Mare Colt under 1 year old—no entry.

BREEDING RINGS.

Brood Mare as shown by 2 of her colts, either sex, under 4 years old—3 entries:	
Premium, J. L. Coppage, Mt. Sterling	50 00
Breeding Stallion as shown by 5 of his colts, either sex, under 4 years old—1 entry:	
Premium, G. W. Means, Hersman	100 00

Lot 36—Horses for all Work—Sweepstakes.

Stallion any age—14 entries:	
Premium, A. T. Dunlap, Galesburg	$100 00
Mare any age—11 entries:	
Premium, J. L. Coppage, Mt. Sterling	50 00

Lot 37—Saddle Horses.

STALLIONS.

Saddle Stallion 4 years old or over—2 entries:	
First premium, C. B. White, Chicago	$20 00
Second premium, G. W. Means, Hersman	10 00

Saddle Stallion 3 and under 4 years—no entry.

Saddle Stallion 2 and under 3 years—no entry.

MARES.

Saddle Mare 4 years old or over—2 entries:	
First premium, Frank L. Goodrich, Chicago	$20 00
Second premium, C. B. Eddy, Finchville, Ky	10 00

Saddle Mare 3 and under 4 years—no entry.

Saddle Mare 2 and under 3 years—no entry.

Awarding Committee—Geo. W. Cowdry, Oswego; R. Lancaster, Virginia; Edwin McFarren, Batavia.

SWEEPSTAKES.

Saddle Gelding, any age—3 entries:	
Premium, C. G. Hersman, Hersman	$50 00
Saddle Mare, any age—2 entries:	
Premium, Frank L. Goodrich, Chicago	50 00
Saddle Stallion, any age—2 entries:	
Premium, C. B. White, Chicago	50 00

Awarding Committee—S. D. Kingsley, O. H. Heath, J. A. Ames.

LOT 38—CARRIAGE HORSES.

Carriage Team—7 entries:	
First premium, John Dupee, Jr., Chicago	$40 00
Second premium, Brown Gilpin & Co., Chicago	20 00
Family Mare or Gelding—14 entries:	
First premium, Wiley Buckles, Champaign	20 00
Second premium, Andrew Armstrong, Beason	10 00

Awarding Committee—Geo. Cowdry, Oswego; Edwin McFarren, Batavia; N. C. Lovett, Watseka.

LOT 39—GENTLEMEN'S DRIVING HORSES.

Pair of Mares, to pole—4 entries:	
First premium, W. C. Furman, Chicago	$40 00
Second premium, J. B. Stevenson, Virginia	20 00
Pair of Geldings, to pole—4 entries:	
Second premium, Geo. H. Covert, Chicago	20 00
Single Stallion, to harness—4 entries:	
First premium, Andrew Armstrong, Beason	40 00
Single Mare, to harness—9 entries—	
First premium, J. B. Stevenson, Virginia	30 00
Second premium, C. P. Willard, Chicago	15 00
Single Gelding, to harness—18 entries:	
First premium, L. Newgass, Chicago	30 00
Second premium, Geo. Smith, Chicago	15 00

LOT 40—JACKS, JENNETS AND MULES.

JACKS—No entry.

JENNETS—No entry.

MULES—No entry.

LOT 41—JACKS AND JENNETS—SWEEPSTAKES.

JACKS—No entry.

JENNETS—No entry.

MULES -No entry.

LOT 43—EQUESTRIANISM.

Boy's riding—5 entries:

First premium, H. W. Armstrong, Beason	$10 00
Second premium, Johnnie Palm, Chicago	5 00
Third premium, George Palm, Chicago	3 00
Fourth premium, Donald Blair, Chicago	2 00
Fifth premium, A. A. Blair, Chicago	1 00

Awarding Committee—P. A. Armstrong, Morris; A. S. Alderman, Lemont; H. G Savage, Chicago.

LOT 43—SADDLE PONIES.

Any age or sex, under 14 hands—2 entries:

First premium, Galbraith Bros., Janesville, Wis	$20 00
Second premium, Galbraith Bros., Janesville, Wis	10 00

Awarding Committee—P. A. Armstrong, Morris; A. S. Alderman, Lemont; H. G. Savage, Chicago.

LOT 44—SPEED—STAKES, $500.

Trotters, 1 and under 2 years—4 entries. Nutbreaker by J. C. McFerran; Diatonic by Y. D. Scales; Royal Cossack by Caton Stock Farm; Knight by Walter Clark. Heats won—1st, Nutbreaker, time 1:31½; 2d, Nutbreaker, time 1:25½.

First money to Nutbreaker	$250 00
Second money to Diatonic	125 00
Third money to Royal Cossack	25 00

Trotters, 2 and under 3 years—5 entries, Jim Crane by Y. D. Scales; Unnamed by Wm. Emmett; Williams by Sanborn; Jeannette by Caton Stock Farm; Greenlander by Aug. Sharpe. Heats won—1st, Greenlander, time 2:34¼; 2d, Greenlander, time 2:32¼.

First money to Greenlander	250 00
Second money to Williams	125 00
Third money to Jeannette	75 00
Fourth money to Unnamed Colt	50 00

Trotters, 4 and under 5 years—4 entries, Elvira by J. C. McFerran; Billy Wilkes by D. Sapp; Epaulette by L. L. Dorsey; Hattie by Walter Clark. Heats won—1st, Elvira, time 2:31½; 2d, Elvira, time 2:30¾; 3d, Elvira, time 2:27¼.

First money to Elvira	250 00
Second money to Epaulette	125 00
Third money to Billy Wilkes	75 00
Fourth money to Elvira	50 00

Two-seventeen trot—3 entries, Troubadour by Wm. Emmett; Pancoast by J. C. McFerran; Chas. Hogan by Budd Doble. Heats won—1st, Chas. Hogan, time 2:29½; 2d. Chas. Hogan, time 2:25½; 3d, Chas. Hogan, time 2:22½.

First money to Chas. Hogan	250 00
Second money to Pancoast	125 00
Third money to Troubadour	75 00

Two-twenty-two trot—5 entries, Florence M. by C. A. Hodges; Algath by J. C. McFerran; Lee W. by L. W. Sinclair; Will Collender by Thos. Foley; Stranger by Wm. Sullivan. Heats won, 1st, Lee W, time 2:27¼; 2d, 3d, Algath, time 2:26½; 4th, Florence, M., time 2:25; 6th, Florence M., time 2:33.

First money to Florence M.	250 00
Second money to Algath	125 00
Third money to Will Collender	75 00
Fourth money to Stranger	50 00

Two-twenty-seven trot—8 entries, Elvira by J. C. McFerran; Zulu by Wm. Foley; Iris by M. Newgass; Dainty by Stephen Bull; Grey Henry by H. V. Padfield; Renegade by Caton Stock Farm; Lee W. by L. W. Sinclair; Maggie K. by Wm. Sharp. Heats won—1st, Lee W., time 2:23½; 2d Lee W., time 2:26¾; 3d, Lee W., time 2:23¼.

First money to Lee W	$250 00
Second money to Elvira	125 00
Third money to Dainty	75 00
Fourth money to Grey Henry	50 00

Two-thirty-four trot—3 entries, Jupiter by Daniel Carney; Chesnut Boy by H. V. Padfield; Annie King by L. W. Sinclair. Heats won—1st, Annie King, time 2;28½; 2d, Annie King, time 2:28½; 3d, Annie King, time 2;33½.

First money to Annie King	250 00
Second money to Chestnut Boy	125 00
Third money to Jupiter	75 00

Two-forty-trot—6 entries, Almeta by L. W. Sinclair; Epaulette by L. L. Dorsey; Grey Eagle by Parker Wynman; Star Hambletonian by W. D. Crockett; Montague Boy by Wm. Sharp; Blaze Medium by Wm. Clark. Heats won—1st, Blaze Medium, time 2:31¾; 2d, Blaze Medium. time 2:30¼; 3d Blaze Medium, time 2:31½.

First money to Blaze Medium	250 00
Second money to Almeta	125 00
Third money to Star Hambletonian	75 00
Fourth money to Epaulette	50 00

Trotting Stallions making season 1884 in Illinois—3 entries, Chestnut Boy by H. V. Padfield; Star Hambletonian by W. D. Crockett; Jupiter by Dan Carney. Heats won—1st, Star Hambletonian, time 2:31; 2d, Star Hambletonian, time 2:30¼; 3d, Star Hambletonian, time 2:31.

First money to Star Hambletonian	137 50
Second money to Chesnut Boy	68 75
Third money to Jupiter	41 25

Pacing race—2:20 class—3 entries, Silvertail by L. W. Sinclair; Sophy F. by Wm. Foley; Black Bassenger by H. Graves; Belle Morse by E. D. Morse. Heats won—1st, by Silvertail, time 2:24¾; 2d, by Silvertail, time 2:24¼; 3d, by Silvertail, time 2:21¼.

First money to Silvertail	250 00
Second money to Sophy F	125 00
Third money to Black Bassenger	75 00
Fourth money to Belle Morse	50 00

CLASS C—SHEEP.

D. W. VITTUM, Jr., *Superintendent.*

Lot 45.—Cotswold.

RAMS.

Rams 2 years old or over—7 entries:

First premium, Thomas Morgan, Camargo	$20 00
Rudolph 1610; dropped March 1882; bred by J. Yeomans, England; sire, Lane ram; dam Yeomans ewe.	
Second premium, Mrs. Ann Newton, Pontiac, Mich	10 00
Forest; dropped, 1882; bred by H. Rolings, Redness Wood, Canada; sire, Lane ram.	

Ram 1 year old and under 2—5 entries:

First premium, Thomas Morgan, Camargo	15 00
Grateful 1629; dropped March 1883; bred by Morgan & Ponting, Moweaqua; sire, Hero 1609; dam, Queen, 1589.	
Second premium, Frank Willson, Jackson, Mich	10 00

Ram Lamb under 1 year old—4 entries:

First premium, Abner Straun, Ottawa	10 00
Second premium, Mrs. Ann Newton, Pontiac, Mich	5 00
Wilton; dropped 1884; bred by Mrs. Ann Newton, Pontiac, Mich.; sire, Wm. Laidley; dam, Stevens' ewe.	

EWES.

Ewe 2 years old or over—7 entries:

First premium, Frank Willson, Jackson, Mich	$20 00
Second premium, Abner Strawn, Ottawa	10 00

Ewe 1 year old and under 2—7 entries:

First premium, Frank Willson, Jackson, Mich	$15 00
Second premium, Thomas Morgan, Camargo	10 00
Dainty 1607; dropped April, 1883; bred by Morgan & Ponting, Moawequa; sire, Hero 1609; dam, Rachel 1590.	

Ewe Lamb under 1 year old—5 entries:

First premium, Abner Strawn, Ottawa	10 00
Second premium, Abner Strawn, Ottawa	5 00

Awarding Committee—W. A. Bickett, Sibley; Wm. Cater, Libertyville; Alfred Griffith, Brownstown.

LOT 46—COTSWOLD—SWEEPSTAKES.

Ram any age—9 entries:

Premium, Thomas Morgan, Camargo	$20 00
Rudolph 1610.	

Ewe any age—9 entries:

Premium, Frank Willson, Jackson, Mich	15 00

Ram and and 5 Ewes over 2 years old—2 entries:

First premium, Thomas Morgan, Camargo	35 00
Second premium, Abner Strawn, Ottawa	15 00

Ram with 5 of his get, under 2 years old, owned and bred by exhibiter:

First premium, Thomas Morgan, Camargo	35 00
Second premium, Frank Willson, Jackson, Mich	15 00

Awarding Committee—J. K. Megginson, Jacksonville; John Turnbull, Elmira; V. P. Richmond, Moro.

LOT 47—LEICESTER OR LINCOLN.

RAMS.

Ram 2 years old or over—2 entries:

First premium, D. C. Graham, Cameron	$20 00
Second premium, D. C. Graham, Cameron	10 00

Ram 1 year old and under 2—3 entries:

First premium, Mrs. Ann Newton, Pontiac, Mich	15 00
Second premium, D. C. Graham, Cameron	10 00

Ram Lamb under 1 year old—2 entries:

First premium, D. C. Graham, Cameron	10 00
Second premium, D. C. Graham, Cameron	5 00

EWES.

Ewe 2 years old or over—2 entries:

First premium, D. C. Graham, Cameron	$20 00
Second premium, D. C. Graham, Cameron	10 00

Ewe 1 year old and under 2—3 entries:

First premium, Mrs. Ann Newton, Pontiac, Mich	15 00
Second premium, D. C. Graham, Cameron	10 00

Ewe Lamb under 1 year old—3 entries:

First premium, Mrs. Ann Newton, Pontiac, Mich	10 00
Second premium, D. C. Graham, Cameron	5 00

Awarding Committee—Alfred Griffith, Brownstown; Wm. Cater, Libertyville; W. A. Bicket, Sibley.

LOT 48—LEICESTER OR LINCOLN—SWEEPSTAKES.

Ram of any age—3 entries:

Premium, D. C. Graham, Cameron	$20 00

Ewe of any age—3 entries:

Premium, D. C. Graham, Cameron	15 00

Ram and 5 Ewes over 2 years old—2 entries:

First premium, D. C. Graham, Cameron	35 00
Second premium, D. C. Graham, Cameron	15 00

Ram with 5 of his get, under 2 years old, owned and bred by exhibiter—2 entries:	
First premium, D. C. Graham, Cameron	$35 00
Second premium, D. C. Graham, Cameron	15 00

Awarding Committee—J. K. Megginson, Jacksonville; John Turnbull, Elmira; V. P. Richmond, Moro.

Lot 49—Southdown.

Ram 2 years old or over—1 entry:	
First premium, Frank Willson, Jackson, Mich	$20 00
Ram 1 year old and under 2—1 entry:	
First premium, Frank Willson, Jackson, Mich	15 00
Ram Lamb under 1 year old—3 entries:	
First premium, L. S. Rupert, Bloomington Chichester; dropped 1884; imported.	10 00
Second premium, Frank Willson, Jackson, Mich	5 00

EWES.

Ewe 2 years old or over—2 entries:	
First premium, L. S. Rupert, Bloomington Nanny 611, A. S. R.	$20 00
Second premium, L. S. Rupert, Bloomington	10 00
Ewe 1 year old and under 2—2 entries:	
First premium, L. S. Rupert, Bloomington	15 00
Second premium, L. S. Rupert, Bloomington	10 00
Ewe Lamb under 1 year old—3 entries:	
First premium, L. S. Rupert, Bloomington	10 00
Second premium, L. S. Rupert, Bloomington	5 00

Awarding Committee—Philip P. Nelson, Manteno; Edward Rodgers, Upper Alton; John Turnbull, Elmira.

Lot 50—Southdown—Sweepstakes.

Ram of any age—2 entries:	
Premium, L. S. Rupert, Bloomington	$20 00
Ewe of any age—3 entries:	
Premium, L. S. Rupert, Bloomington Nanny 611, A. S. R.	15 00

Ram and 5 ewes over 2 years old—No entry.

Ram with 5 of his get under 2 years old, owned and bred by exhibiter—No entry.

Awarding Committee—Geo. Allen, Palermo; Thos. Taylor, Waynesville; Wm. Reed, French Grove.

Lot 51—Shropshiredown, Hampshiredown and other Purebred Middle Wools.

RAMS.

Ram 2 years old or over—10 entries:	
First premium, F. C. Goldsborough, Easton, Md	$20 00
Second premium, Stone & Loake, Stonington	10 00
Ram 1 year old and under 2—16 entries:	
First premium, F. C. Goldsborough, Easton, Md	15 00
Second premium, Geo. Allen & Son, Archie	10 00
Ram Lamb under 1 year old—10 entries:	
First premium, Mrs. Ann Newton, Pontiac, Mich	10 00
Second premium, Mrs. Ann Newton, Pontiac, Mich	5 00

EWES.

Ewe 2 years old or over—16 entries:	
First premium, Geo. Allen & Son, Archie	$20 00
Second premium, Geo. Allen & Son, Archie	10 00

Ewe 1 year old and under 2—14 entries:

First premium, F. C. Goldsborough, Easton, Md	$15 00
Second premium, F. C. Goldsborough, Easton, Md	10 00

Ewe Lamb under 1 year old—12 entries:

First premium, Mrs. Ann Newton, Pontiac, Mich	10 00
Second premium, Mrs. Ann Newton, Pontiac, Mich	5 00

Awarding Committee—R. Rowett, Quincy; Wm. Brown, Berlin; J. A. Bellinger, Mahomet.

LOT 52—SHROPSHIREDOWN, ETC.—SWEEPSTAKES.

Ram of any age—12 entries:

Premium, F. C. Goldsborough, Easton, Md	$20 00
Bicester.	

Ewe of any age—11 entries:

Premium, F. C. Goldsborough, Easton, Md	15 00
Belle of Chicago.	

Ram and 5 Ewes over 2 years old—3 entries:

First premium, Stone & Loake, Stonington	35 00
Second premium, Geo. Allen & Son, Archie	15 00

Ram with 5 of his get under 2 years old, owned and bred by the exhibiter—5 entries:

First premium, Geo. Allen & Son, Archie	35 00
Second premium, Stone & Loake, Stonington	15 00

Awarding Committee—Philip P. Nelson, Manteno; Edward Rodgers, Upper Alton; John Turnbull, Elmira.

LOT 53—AMERICAN MERINO.

Ram 2 years old or over—19 entries:

First premium, Daniel Kelley & Son, Wheaton	$20 00
Second premium, E. Peck & Sons, Geneva	10 00
Rich, Jr.; dropped 1881; bred by E. Peck & Sons, Geneva; sire, Rich 402; dam, J. Towne 19.	

Ram 1 year old and under 2—27 entries:

First premium, A. T. Short, Coldwater, Mich	15 00
Second premium, A. T. Short, Coldwater, Mich	10 00

Ram Lamb under 1 year old—10 entries:

First premium, Cook & Morse, Raymonds, O	10 00
Second premium, G. W. McFadden & Bro., Atlanta	5 00
No. 33; dropped 1884; bred by G. W. McFadden & Bro., Atlanta; sire, Smuggler No. 182; dam, Cutting Ewe No. 43.	

EWES.

Ewe 2 years old or over—22 entries:

First premium, Cook & Morse, Raymonds, O	$20 00
Second premium, E. Peck & Sons, Geneva	10 00
No. 299; dropped 1882; bred by E. Peck & Sons, Geneva; sire, Hubbard 102; dam, J. Towne 60.	

Ewe 1 year old and under 2—20 entries:

First premium, E. Peck & Sons, Geneva	15 00
Wrinkley 608; dropped 1883; bred by E. Peck & Sons, Geneva; sire, L. C. Remele 76; dam, J. Towne 19.	
Second premium, G. W. McFadden & Bro., Atlanta	10 00
Little Gem No. 22; dropped 1883; bred by G. W. McFadden & Bro.; sire, Smuggler No. 182; dam, Ewe No. 4.	

Ewe Lamb under 1 year old—18 entries:

First premium, Cook & Morse, Raymonds, O	10 00
Second premium, E. Peck & Sons, Geneva	5 00
No. 611; dropped 1884; bred by E. Peck & Sons, Geneva; sire, Remele 76; dam, J. Towne 19.	

Judge—F. E. Day, Washburn.

LOT 54—AMERICAN MERINO—SWEEPSTAKES.

Ram of any age—20 entries:	
Premium, A. T. Short, Coldwater, Mich	$20 00
Ewe of any age—22 entries:	
Premium, Cook & Morse, Raymonds, O.	15 00
Ram and 5 Ewes over 2 years old—7 entries:	
First premium, E. Peck & Sons, Geneva	35 00
Second premium, Cook & Morse, Raymonds, O	15 00
Ram with 5 of his get, under 2 years old, owned and bred by the exhibiter—14 entries:	
First preminm, A. T. Short, Coldwater, Mich.	35 00
Second premium, E. Peck & Sons, Geneva	15 00

Judge—F. E. Day, Washburn.

LOT 55—SILESIAN AND SAXONY MERINO.

No entries.

LOT 56—FRENCH MERINO, ETC.—SWEEPSTAKES.

No entries.

LOT 57—FLEECES.

LONG WOOLS.

Twelve months fleece from sheep over 2 years old—3 entries:	
Premium, D. C. Graham, Cameron	$5 00
Fleece from sheep under 2 years old—3 entries:	
Premium, D. C. Graham, Cameron	5 00

MIDDLE WOOLS.

Twelve months fleece from sheep over 2 years old—2 entries:	
Premium, Abner Strawn, Ottawa	5 00
Fleece from sheep under 2 years old—2 entries:	
Premium, C. E. Angell, Oshkosh, Wis.	5 00

FINE WOOLS.

Twelve months fleece from sheep over 2 years old—1 entry:	
Premium, E. Peck & Sons, Geneva	5 00
Fleece from sheep under 2 years old—1 entry:	
Premium, E. Peck & Sons, Geneva	5 00

Judge—V. P. Richmond, Moro.

LOT 58—FLOCKS—GRAND SWEEPSTAKES.

Display of Breeding Sheep of any breed, exhibited and bred by a resident of the State—9 entries:	
First premium, Geo. Allen & Son, Archie	$125 00
Second premium, E. Peck & Sons, Geneva	75 00

Awarding Committee—J. K. Megginson, Jacksonville; John Turnbull, Elmira; V. P. Richmond, Moro.

Lot 59—Sheep Breeders' Prizes.

MIDDLE WOOL.

Pen of Purebred Sheep—1 entry. No award.

FINE WOOL.

Pen of Purebred Sheep—3 entries:
Premium, E. Peck & Sons, Geneva .... Silver Goblet

CLASS D—SWINE.

DAVID GORE, *Superintendent.*

Lot 60—Berkshire.

BOARS.

Boar 2 years old or over—3 entries:
First premium, Daub & Mathers, Jacksonville $20 00
Master Hood 10199; farrowed September 16, 1881; bred by Jas. W. Boston, Jacksonville; sire, Bob Hood 2079; dam, D'Israeli's Damsel 10198.
Second premium, D. W. Todd, Urbana, O. 10 00
Barker 10211; farrowed March 16, 1881; bred by I. N. Barker, Thorntown, Ind., sire, American Prince 833; dam, Barker's Favorite 1458.

Boar 1 year old and under 2—13 entries:
First premium, W. C. Norton, Aldenville, Pa 20 00
Hero; farrowed September 6, 1883; bred by W. C. Norton, Agent, Aldenville, Pa.; sire, Black Cloud, 4723: dam, Sallie R. 6960.
Second premium, A. M. Fulford, Belair, Md 10 00

Boar under 1 year old—19 entries:
First premium, Clifford & White, Wellington, O 15 00
Jehu; farrowed April 7, 1884; bred by Clifford and White, Wellington, O.; sire, King James 3181; dam, Fancy Girl, 6812.
Second premium, Clifford & White, Wellington, O. 10 00
Ironsides; farrowed March 21, 1884; bred by Clifford & White, Wellington, O.; sire, Tom Boy 4755; dam, Pearl of Oxford 8878.

SOWS.

Sow 2 years old or over—7 entries:
First premium, W. C. Norton, Aldenville, Pa 20 00
Dolly, farrowed March 20. 1880; bred by W. C. Norton, Agent, Aldenville, Pa.; sire, Robin Hood, 801; dam, Dolly VI, 3322.
Second premium, A. W. Fulford, Belair, Md. 10 00

Sow 1 year old and under 2—14 entries:
First premium, D. W. Todd, Urbana, O 20 00
Zerah 12155; farrowed July 28, 1883; bred by D. W. Todd, Urbana, O.; sire, Duke of Urbana 10035;dam, Zenona 11846.
Second premium, D. W. Todd, Urbana, O. 10 00
Zeulah 12156; farrowed July 28, 1883; bred by D. W. Todd, Urbana, O.; sire, Duke of Urbana 10035; dam, Zenona 11846.

Sow under 1 year old—15 entries:
First premium. W. C. Norton, Aldenville, Pa 15 00
Juno; farrowed October 11. 1884; bred by W. C. Norton, Agent, Aldenville, Pa.; sire, Black Cloud, 4723; dam, Sallie R. 5th, 6962.
Second premium, Daub & Mathers, Jacksonville 10 00
Lady Morgan; farrowed 1884; bred by Geo. Sybrant, Jacksonville, sire, Master Hood, 10199; dam, Balmoral, 10894.

BREEDERS' RINGS.

Sow with litter of pigs, not less than five, under 6 months old—6 entries:
First premium, D. W. Todd, Urbana, O 20 00
Second premium, Clifford & White, Wellington, O 10 00

Pen of Breeding Hogs—Boar and 4 Sows over 1 year old, owned by exhibiter—4 entries:
Premium, D. W. Todd, Urbana, O 25 00

Five head of Swine, any age, the get of 1 Boar; sire to be shown with the pen and considered in making the award—5 entries:
Premium, Daub & Mathers, Jacksonville $20 00

Awarding Committee—H. M. Sisson, Galesburg; E. W. Bryant, Princeton; D. G. Ryburn, Randolph; J. R. Bartlett, Blackberry.

LOT 61—BERKSHIRE—SWEEPSTAKES.

Boar of any age—16 entries:
Premium, Clifford & White, Wellington, O $20 00
Jehu.

Sow of any age—20 entries:
Premium, Clifford & White, Wellington, O 20 00
Lady W.; farrowed Oct. 20, 1883; bred by Clifford & White, Wellington, O.; sire, King James 3181; dam, Dora A. 9636.

Awarding Committee—J. B. Kearns, Garden Plain; E. W. Booth, Gardener; W. A. Baker, Greenwood.

LOT 62—POLAND CHINA.

BOARS.

Boar 2 years old or over—4 entries:
First premium, Davis & Frazier, Moorland, Ind $20 00
Sears' Corwin; farrowed April 5, 1882; bred by M. Edwards, Knightstown, Ind.; sire, Lord Corwin 2d 1313; dam, Lady Belle 1164.
Second premium, Tilford Rice, Larchland 10 00
Hero 987; farrowed June 1, 1881; bred by B. F. Dorsey, Perry; sire Gen. Garfield 567; dam, Mollie Dorsey 1990.

Boar 1 year old and under 2—9 entries:
First premium, W. C. Williams & Son, Knightstown, Ind 20 00
Ben Bolt; farrowed March 21, 1883; bred by W. C. Williams & Co., Knightstown, Ind.; sire, Lord Corwin 2d 1313; dam. Elsie Lennox 3028.
Second premium, W. C. Williams & Son, Knightstown, Ind 10 00
Lord Corwin 4th; farrowed March 1883; bred by W. C. Williams & Co., Knightstown, Ind.; sire, Lord Corwin 2d 1313; dam, Lady Gold Dust 1168.

Boar under 1 year old—16 entries:
First premium, W. C. Williams & Son, Knightstown Ind 15 00
Ruler: farrowed October 24, 1883; bred by W. C. Williams & Co., Knightstown, Ind; sire, Corwin 2347; dam, Cinderella 1170.
Second premium, A. S. Gilmour & Co., Greensburg, Ind 10 00
Sweepstakes; farrowed Dec. 2, 1883; bred by A. S. Gilmour & Co., Greensburg, Ind.; sire, King Corwin; dam, Bessie World-Beater.

SOWS.

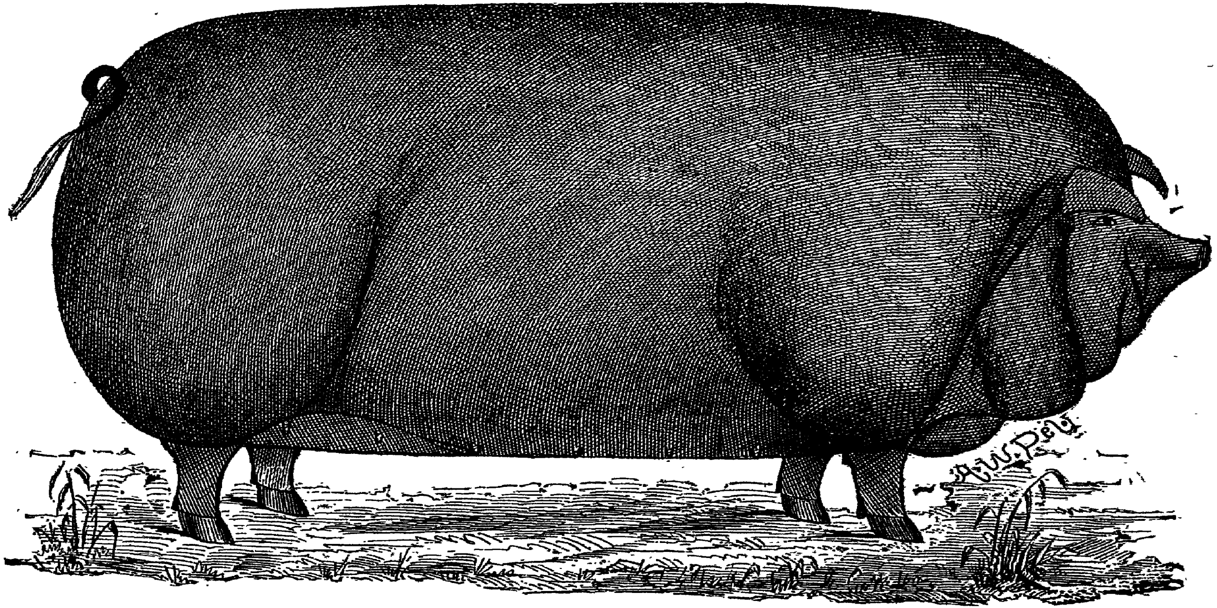
Sow 2 years old or over—15 entries:
First premium, H. J. Nash, Urbana $20 00
Lady Grant 3156; farrowed May 8, 1882; bred by H. J. Nash, Urbana; sire, Dick Nash 1671; dam, Queen of Clark 2d 3154.
Second premium, W. C. Williams & Son, Knightstown, Ind 10 00
Elsie Lennox farrowed March 14, 1882; bred by W. C. Williams & Co., Knightstown, Ind.; sire Chief Justice 1123; dam, Katie Lennox 3336.

Sow 1 year old and under 2—11 entries:
First premium, W. C. Williams & Son, Knightstown, Ind 20 00
Wild Flower; farrowed Feb. 7, 1883; bred by W. C. Williams & Co., Knightstown, Ind., sire, Lord Corwin 2d, 1313; dam, Alice 2d, 1174.
Second premium, A. S. Gilmour & Co., Greensburg, Ind 10 00
Kate Corwin; farrowed Aug. 23, 1883; bred by A. S. Gilmour & Co., Greensburg, Ind.; sire, Oxford Boy; dam Queen Corwin.

Sow under 1 year old—21 entries:
First premium, A. S. Gilmour & Co., Greensburg, Ind 15 00
Grand Duchess; farrowed Nov. 11, 1883; bred by A. S. Gilmour & Co., Greensburg, Ind.; sire, King Corwin; dam, Black Duchess.
Second premium, H. J. Nash, Urbana 10 00
Lady Grant 5th; farrowed Feb. 14, 1884; bred by H. J. Nash, Urbana; sire, Dick's Gem 1669; dam, Gem 1476.

BREEDING RINGS.

Sow with litter of pigs, not less than 5, under 6 months old—5 entries:
First premium, W. C. Williams & Son, Knightstown, Ind $20 00
Second premium, Tilford Rice, Larchland 10 00



Poland China Sow, Purity F, 4742, exhibited by W. C. Williams & Son, Knightstown, Ind. Awarded Sweepstakes Premium State Fair, 1884.—p 60.

Pen of Breeding Hogs, 1 Boar and 4 Sows over 1 year old, owned by the exhibiter—6 entries:
Premium, W. C. Williams & Son, Knightstown, Ind. $25 00

Five head of Swine, any age, the get of 1 boar, the sire to be shown with the pen, and considered in making the award—4 entries:
Premium, Tilford Rice, Larchland 20 00

Awarding Committee—L. G. Wilkerson, Piasa; J. Tabor Mathers, Jacksonville; J. W. Ramsey, Jacksonville.

LOT 63—POLAND CHINA—SWEEPSTAKES.

Boar of any age—20 entries:
Premium, Davis & Frazier, Moreland, Ind. $20 00

Sow of any age—23 entries:
Premium, W. C. Williams & Son, Knightstown, Ind. 20 00

Awarding Committee—W. A. Baker, Greenwood; J. B. Kearns, Garden Plain; G. W. Booth, Gardner; W. W. Ellsworth, Woodstock.

LOT 64—CHESTER WHITE AND VICTORIAS.

BOARS.

Boar 2 years old or over—5 entries:
First premium, S. H. Todd, Wakeman, O. $20 00
Second premium, E. R. Moody, Eminence, Ky. 10 00
Caleb Walter 2015; farrowed 1882; bred by C. M. Walter, West Chester, Pa.; sire, Indicator 149; dam, Dido 174.

Boar 1 year old and under 2—3 entries:
First premium, E. R. Moody, Eminence, Ky. 20 00
Little Joe 2139; farrowed 1883; bred by R. S. Russell, Zionsville, Ind.; sire, Joe W. 2177; dam, Daisy Russell 2454.
Second premium, Daub & Mathers, Jacksonville 10 00
Duke of Chester; not recorded.

Boar under 1 year old—12 entries:
First premium, George F. Davis & Co., Dyer, Ind. 15 00
White Butterfly; farrowed December 20, 1883; bred by Scheidt & Davis, Dyer, Ind.; sire, Victoria boar; dam, Victoria sow.
Second premium, S. H. Todd, Wakeman, O. 10 00

SOWS.

Sow 2 years old or over—12 entries:
First premium, S. H. Todd, Wakeman, O. $20 00
Second premium, S. H. Todd, Wakeman, O. 10 00

Sow 1 year old and under 2—12 entries:
First premium, George F. Davis & Co., Dyer, Ind. 20 00
Queen of Beauty; farrowed August 28, 1883; bred by Scheidt & Davis, Dyer, Ind.; sire, Victoria; dam, Victoria.
Second premium, Daub & Mathers, Jacksonville 10 00
Lady Chester; not recorded.

Sow under 1 year old—16 entries:
First premium, S. H. Todd, Wakeman, O. 15 00
Second premium, George F. Davis & Co., Dyer, Ind. 10 00
Rose Duchess 2d; farrowed October 10, 1883; bred by Scheidt & Davis, Dyer, Ind.; sire, Victoria; dam, Victoria.

BREEDING RINGS.

Sow with litter of pigs, not less than 5, under 6 months old—9 entries:
First premium, George F. Davis & Co., Dyer, Ind. $20 00
Second premium, S. H. Todd, Wakeman, O. 10 00

Pen of Breeding Hogs, 1 Boar and 4 Sows, over 1 year old, owned by the exhibiter—5 entries:
Premium, S. H. Todd, Wakeman, O. 25 00

Five head of Swine of any age, the get of 1 boar, the sire to be shown with the pen, and considered in making the award—6 entries:	
Premium, S. H. Todd, Wakeman, O	$20 00

Awarding Committee—W. H. Johnson, Fairbury; S. R. Thomas, Virden; Wm. Peterson, Stark; J. S. Laufear, Lockport; Boone Ingels, El Paso.

LOT 65—CHESTER WHITE AND VICTORIA—SWEEPSTAKES.

Boar of any age—11 entries:	
Premium, Daub & Mathers, Jacksonville Duke of Chester.	$20 00
Sow of any age—13 entries:	
Premium, S. H. Todd, Wakeman, O	20 00

Awarding Committee—S. W. Riegle, Franklin Grove; J. W. Ramsey, Jacksonville; D. Bartholomew, Batavia.

LOT 66—ESSEX.

BOARS.

Boar 2 years old or over—3 entries:	
First premium, Abraham Reid, Jacksonville	$20 00
Second premium, Frank Willson, Jackson, Mich	10 00
Boar 1 year year old and under 2—2 entries:	
First premium, Frank Willson, Jackson, Mich	20 00
Second premium, Abraham Reid, Jacksonville	10 00
Boar under 1 year old—4 entries:	
First premium, Abraham Reid, Jacksonville	15 00
Second premium, Frank Willson, Jackson, Mich	10 00

SOWS.

Sow 2 years old or over—5 entries:	
First premium, Frank Willson, Jackson, Mich	$20 00
Second premium, Abraham Reid, Jacksonville	10 00
Sow 1 year old and under 2—4 entries:	
First premium, Frank Willson, Jackson, Mich	20 00
Second premium, Abraham Reid, Jacksonville	10 00
Sow under 1 year old—6 entries:	
First premium, Frank Willson, Jackson, Mich	15 00
Second premium, Abraham Reid, Jacksonville	10 00

BREEDING RINGS.

Sow with litter of pigs, not less than 5, under 6 months old—3 entries:	
First premium, Frank Willson, Jackson, Mich	$20 00
Second premium, Frank Willson, Jackson, Mich	10 00
Pen of Breeding Hogs, 1 Boar and 4 Sows over 1 year old, owned by the exhibiter—2 entries:	
Premium, Abraham Reid, Jacksonville	25 00
Five head of Swine of any age, the get of one boar, sire to be shown with the pen and considered in making the award—3 entries:	
Premium, Abraham Reid, Jacksonville	20 00

Awarding Committee—S. H. Todd, Wakeman, O.; E. A. Crapnell, New Boston; E. R. Moody, Eminence, Ky.

LOT 67—ESSEX—SWEEPSTAKES.

Boar of any age—6 entries:	
Premium, Abraham Reid, Jacksonville	$20 00
Sow of any age—6 entries:	
Premium, Frank Willson, Jackson, Mich	20 00

Awarding Committee—D. Bartholomew, Batavia; J. W. Ramsey, Jacksonville; M. E. Jones, Wheaton.

LOT 68—SMALL YORKSHIRE AND SUFFOLK.

BOARS.

Boar 2 years old or over—2 entries:

First premium, W. C. Norton, Aldenville, Pa.	$20 00
Duke of Yorkshire 11th, 128; farrowed April 17, 1881; bred by Harris & Norton, Aldenville, Pa.; sire, Duke of Yorkshire; dam, Snow Drop 7th.	
Second premium, Frank Willson, Jackson, Mich.	10 00

Boar 1 year old and under 2—3 entries:

First premium, W. C. Norton, Aldenville, Pa.	20 00
Chicago Boy, farrowed April 22, 1883; bred by W. C. Norton, Agent, Aldenville, Pa.; sire, Lucien 2d, 150; dam, Queen Bess 6th (186).	
Second premium, Frank Willson, Jackson, Mich.	10 00

Boar under 1 year old—5 entries:

First premium, W. C. Norton, Aldenville, Pa.	15 00
Young Lucien, farrowed April 12, 1881; bred by W. C. Norton, Agent, Aldenville, Pa.; sire, Lucien 2d, 150; dam, Queen Bess 7th (269).	
Second premium, Frank Willson, Jackson, Mich	10 00

SOWS.

Sow 2 years old or over—4 entries:

First premium, W. C. Norton, Aldenville, Pa.	$20 00
Model Gem, 296, farrowed June 16, 1882; bred by W. C. Norton, Agent, Aldenville, Pa.; sire, Robert 85; dam, Model Queen 5th, 163.	
Second premium, W. C. Norton, Aldenville, Pa.	10 00
Queen Bess 6th, (186), farrowed October 14, 1880; bred by G. W. Harris, Aldenville, Pa.; sire, Duke of Yorkshire 2d, 191; dam, Queen Bess 2d.	

Sow 1 year old and under 2—4 entries:

First premium, Frank Willson, Jackson, Mich	20 00
Second premium, W. C. Norton, Aldenville, Pa.	10 00
Fair Lass, 302, farrowed October 25, 1882; bred by W. C. Norton, Agent, Aldenville; Pa.; sire, King John, 5; dam, Queen Bess 6th, (186).	

Sow under 1 year old—6 entries:

First premium W. C. Norton, Aldenville, Pa	15 00
Rachel, 425, farrowed October 9, 1883; bred by W. C. Norton, Agent, Aldenville, Pa.; sire, Lord Spenser, 161; dam, Queen Bess 7th, (269).	
Second premium, Frank Willson, Jackson, Mich.	10 00

BREEDING RINGS.

Sow with litter of pigs, not less than 5, under 6 months old—3 entries:

First premium, W. C. Norton, Aldenville, Pa.	$20 00
Second premium, Frank Willson, Jackson, Mich.	10 00

Pen of Breeding Hogs, 1 Boar and 5 Sows, over 1 year old, owned by the exhibiter—2 entries:

Premium, W. C. Norton. Aldenville. Pa.	25 00

Five head of Swine, any age, the get of one boar, sire to be shown with the pen and considered in making the award—2 entries:

Premium, W. C. Norton, Aldenville, Pa.	20 00

Awarding Committee—E. R. Moody, Eminence, Ky.; S. H. Todd, Wakeman, O.; H. N. Mayham, Ivanhoe.

LOT 69—SMALL YORKSHIRE AND SUFFOLK—SWEEPSTAKES.

Boar of any age—6 entries.

Premium, W. C. Norton, Aldenville, Pa.	$20 00

Sow of any age—6 entries.

Premium, Frank Willson, Jackson, Mich.	20 00

Awarding Committee—S. W. Riegle, Franklin Grove; J. W. Ramsey, Jacksonville; D. Bartholomew, Batavia.

Lot 70—Duroc Jersey.

BOARS.

Boar 2 years old or over—1 entry:
First premium, B. T. Railsback, Hopedale $20 00
Dan Voorhees Jr. 323; farrowed May 2, 1882; bred by A. W. Ditman, Illinois; sire, Dan Voorhees; dam, Jennie D. 1068.

Boar 1 year old and under 2—5 entries:
First premium, G. W. Stoner, La Place 20 00
Breckinridge 387; farrowed March 18, 1883; bred by J. N. Rozzelle, Breckinridge, Mo.
Second premium, Kearns & Parker, Garden Plain 10 00
Blackfoot Prince; farrowed February 28, 1883; bred by G. W. Stoner, La Place; sire, Indian Chief; dam, Banner Good.

Boar under 1 year old—9 entries:
First premium, B. T. Railsback, Hopedale 15 00
Logan; farrowed March 29, 1884; bred by B. T. Railsback, Hopedale; sire, Dan Voorhees Jr. 323; dam, Mollie C. 836.
Second premium, Kearns & Parker, Garden Plain 10 00
Emma's Duke; farrowed May 18, 1884; bred by Kearns & Parker, Garden Plain; sire, Gold Coin 433; dam, Emma 1466.

SOWS.

Sow 2 years old or over—3 entries:
First premium, B. T. Railsback, Hopedale $20 00
Jennie D. 1068; farrowed May 10, 1879; bred by John S. Collins, Morristown, N. J.; sire, Excelsior; dam, Laura.
Second premium, G. W. Stoner, La Place 10 00
Vida 218; farrowed April, 1882; bred by G. W. Stoner, La Place; sire, Indian Chief 385; dam, Vetruria.

Sow 1 year old and under 2—4 entries:
First premium, Kearns & Parker, Garden Plain 20 00
Scythia; farrowed May, 1883; bred by Kearns & Parker, Garden Plain; sire, Ajax 429; dam, Junipera 1440.
Second premium, B. T. Railsback, Hopedale 10 00
Beauty D. 2d; farrowed May 12, 1883; bred by B. T. Railsback, Hopedale; sire, Roadmaster; dam, Beauty D. 1262.

Sow under 1 year old—12 entries:
First premium, Kearns & Parker, Garden Plain 15 00
Juniper's Duchess 1st; farrowed Dec. 1, 1883; bred by Kearns & Parker, Garden Plain; sire, Ajax 429; dam, Junipera 1440.
Second premium, B. T. Railsback, Hopedale 10 00
Red Bess; farrowed April 1, 1884; bred by B. T. Railsback, Hopedale; sire, Dan Voorhees Jr. 323; dam, Mollie C. 836.

BREEDING RINGS.

Sow with litter of Pigs, not less than 5, under 6 months old—5 entries:
First premium, G. W. Stoner, La Place $20 00
Second premium, B. T. Railsback, Hopedale 10 00

Pen of Breeding Hogs, 1 Boar and 4 Sows, over 1 year old, owned by exhibiter—1 entry:
Premium, B. T. Railsback, Hopedale 25 00

Five head of Swine, any age, the get of one boar, sire to be shown with the pen and considered in making the award—4 entries:
Premium, G. W. Stoner, La Place 20 00

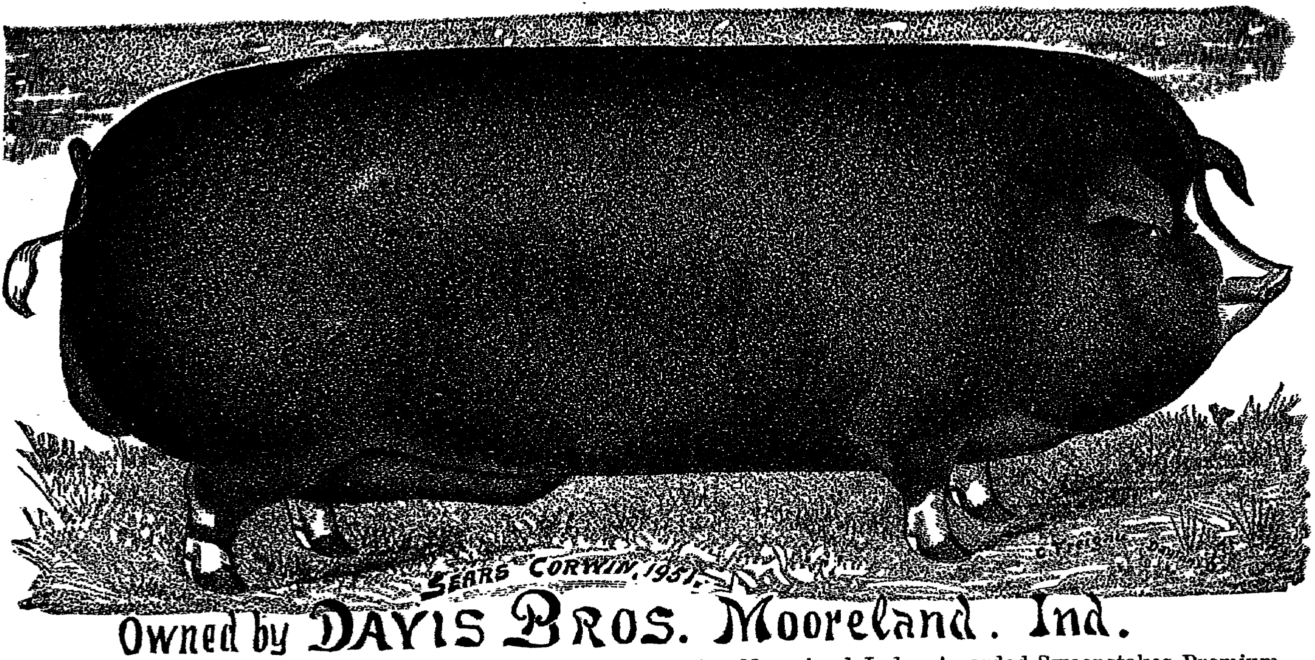
Awarding Committee—D. Bartholomew, Batavia; J. W. Ramsey, Jacksonville; M. E. Jones, Wheaton.

Lot 71—Duroc Jersey—Sweepstakes.

Boar of any age—8 entries:
Premium, G. W. Stoner, La Place $20 00
Dictator.

Sow of any age—11 entries:
Premium, B. T. Railsback, Hopedale 20 00
Jennie D. 1068.

Awarding Committee—S. W. Riegle, Franklin Grove; Ezra Stetson, Neponset; D. W. Todd, Urbana, O.


SEARS CORWIN, 1951.
Owned by DAVIS BROS. Mooreland. Ind.

Poland China Boar, Sears' Corwin, exhibited by Davis & Frazier, Mooreland, Ind. Awarded Sweepstakes Premium, State Fair, 1884—p. 65.

LOT 72—OTHER DISTINCT BREEDS.

No entries.

LOT 73—SWEEPSTAKES—HERDS.

Open to all.

Boar and 5 Sows, any age, each entry to be composed of animals of the same breed—22 entries:

First premium, W. C. Williams & Son, Knightstown, Ind.	$50 00
Second premium, A. S. Gilmour & Co., Greensburg, Ind.	25 00

Awarding Committee—H. C. Castle, Wilmington; Geo. Booth, Gardner; W. W. Ellsworth, Woodstock.

LOT 74—SWINE BREEDERS' PRIZES.

BERKSHIRE.

Pen to consist of Boar over 1 year old; two Sows 2 years old or over, two Sows 1 and under 2 years old, and two Sows under 1 year old—2 entries:

Premium, D. W. Todd, Urbana, O.	Silver Goblet

POLAND CHINA.

Pen to consist of Boar over 1 year old, two Sows 2 years old or over, two Sows 1 and under 2 years old, and two Sows under 1 year old—2 entries:

Premium, W. Williams & Son, Knightstown, Ind.	Silver Goblet

CLASS E—POULTRY.

JOHN GRIFFITH, *Superintendent.*

LOT 75—ASIATIC.

Pair Light Brahmas, fowls—11 entries:	
First premium, J. B. Foot, Norwood Park	$3 00
Second premium, J. B. Foot, Norwood Park	2 00
Pair Light Brahmas, chicks—8 entries:	
First premium, T. K. Bobb, Decatur	3 00
Second premium, J. B. Foot, Norwood Park	2 00
Pair Dark Brahmas, fowls—5 entries:	
First premium, P. A. Bartlett, Jacksonville	3 00
Second premium, Eugene Sites, West Dover, O.	2 00
Pair Dark Brahmas, chicks—4 entries:	
First premium, Eugene Sites, West Dover, O.	3 00
Second premium, W. V. R. Powis, Chicago	2 00
Pair Buff Cochins, fowls—10 entries:	
First premium, J. B. Foot, Norwood Park	3 00
Second premium, S. K. Davis, Bristol	2 00
Pair Buff Cochins, chicks—10 entries:	
First premium, T. K. Bobb, Decatur	3 00
Second premium, J. B. Foot, Norwood Park	2 00
Pair Partridge Cochins, fowls—7 entries:	
First premium, J. B. Foot, Norwood Park	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Partridge Cochins, chicks—8 entries:	
First premium, J. B. Foot, Norwood Park	3 00
Second premium, J. R. Brabazon, Delavan, Wis.	2 00

Pair White Cochins, fowls—3 entries:	
Second premium, J. R. Brabazon, Delavan, Wis	$2 00
Pair White Cochins, chicks—1 entry;	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Pair Black Cochins, fowls—6 entries;	
First premium, James D. Cass, Beloit, Wis	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Black Cochins, chicks—5 entries:	
No premium awarded.	
Display of Asiatics, fowls or chicks—5 entries:	
Premium, J. B. Foot, Norwood Park	10 00

Lot 76—Dorking, Dominique and Plymouth Rock.

Pair Silver Gray, fowls—1 entry:	
First premium, G. M. Emrick, Chicago	$3 00
Pair White, fowls—3 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Second premium, G. M. Emrick, Chicago	2 00
Pair White, chicks—2 entries:	
First premium, P. A. Bartlett, Jacksonville	3 00
Second premium, Eugene Sites, West Dover, O	2 00
Pair Colored, fowls—2 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Colored, chicks—2 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Pair American Dominiques, fowls—5 entries:	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Second premium, Eugene Sites, West Dover, O	2 00
Pair American Dominiques, chicks—4 entries:	
First premium, G. M. Emrick, Chicago	3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00
Pair Plymouth Rocks, fowls—11 entries:	
First premium, G. M. Emrick, Chicago	3 00
Second premium, F. M. Munger, DeKalb	2 00
Pair Plymouth Rocks, chicks—21 entries:	
First premium, J. B. Foot, Norwood Park	3 00
Second premium, J. B. Foot, Norwood Park	2 00
Display Dorking, Dominique and Plymouth Rock—7 entries:	
Premium, G. M. Emrick, Chicago	10 00

Lot 77—Spanish.

Pair Black Spanish (white face), fowls—3 entries:	
First premium, G. M. Emrick, Chicago	$3 00
Second premium, G. M. Emrick, Chicago	2 00
Pair Black Spanish (white face), chicks—2 entries:	
No award.	
Pair White Leghorn, fowls—4 entries:	
First premium, P. A. Bartlett, Jacksonville	3 00
Second premium, G. M. Emrick, Chicago	2 00
Pair White Leghorn, chicks—13 entries:	
First premium, E. E. Kennicott, Arlington Heights	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Brown Leghorn, fowls—9 entries:	
First premium, E. E. Kennicott, Arlington Heights	3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00
Pair Brown Leghorn, chicks—10 entries:	
First premium, A. Young, Decatur	3 00
Second premium, A. Young, Decatur	2 00
Pair Dominique Leghorn, fowls—1 entry:	
First premium, Eugene Sites, West Dover, O	3 00

Pair Black Leghorn, fowls—3 entries:	
First premium, Eugene Sites, West Dover, O	$3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Black Leghorn, chicks—1 entry:	
No award.	
Display of Spanish, fowls or chicks—6 entries:	
Premium, G. M. Emrick, Chicago	10 00

LOT 78—HAMBURGS.

Pair Golden Penciled, fowls—1 entry:	
First premium, G. M. Emrick, Chicago	$3 00
Pair Golden Penciled, chicks—1 entry:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Silver Penciled, chicks—4 entries:	
First premium, J. H. Johnson, Chicago	3 00
Second premium, J. H. Johnson, Chicago	2 00
Pair Golden Spangled, fowls—6 entries:	
First premium, A. Young, Decatur	3 00
Second premium, Eugene Sites, West Dover, O	2 00
Pair Golden Spangled, chicks, 1 entry:	
First premium, P. A. Bartlett, Jacksonville	3 00
Pair Silver Spangled, fowls—3 entries:	
First Premium, J. R. Brabazon, Delavan, Wis	3 00
Second premium, Blenz & Wheelock, Decatur	2 00
Pair Silver Spangled, chicks—3 entries:	
First premium, Blenz & Wheelock, Decatur	3 00
Second premium, Blenz & Wheelock, Decatur	2 00
Pair Black, fowls—3 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Black, chicks—3 entries:	
First premium, J. R. Brabazon, Delavan. Wis	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00

LOT 79—POLISH.

Pair Golden Spangled, fowls—3 entries:	
First premium, G. M. Emrick, Chicago	$3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00
Pair Golden Spangled, chicks—5 entries:	
First premium, G. M. Emrick, Chicago	3 00
Second premium, Blenz & Wheelock, Decatur	2 00
Pair Silver Spangled, fowls—3 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Second premium, James D. Cass, Beloit, Wis	2 00
Pair White Crested Black, fowls—5 entries:	
First premium, P. A. Bartlett, Jacksonville	3 00
Second premium, Eugene Sites, West Dover, O	2 00
Pair White Crested Black, chicks—8 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00
Pair Sultan, fowls—1 entry:	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Pair White, fowls—3 entries:	
First premium, G. M. Emrick, Chicago	3 00
Second premium, Eugene Sites, West Dover, O	2 00
Pair White, chicks—2 entries:	
First premium, G. M. Emrick, Chicago	3 00

LOT 80—FRENCH.

Pair Houdan, fowls—8 entries:	
First premium, G. M. Emrick Chicago	$3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00
Pair Houdan, chicks—8 entries:	
First premium, G. M. Emrick, Chicago	3 00
Second premium, G. M. Emrick, Chicago	2 00
Pair Creve-cœur, fowls 2 entries:	
First premium, P. A. Bartlett, Jacksonville,	3 00
Second premium, Eugene Sites, West Dover, O	2 00
Pair Creve-cœur, chicks—2 entries:	
First premium, P. A. Bartlett, Jacksonville	3 00
Second premium, Eugene Sites, West Dover, O	2 00

LOT 81—GAME.

Pair Black-breasted Red, fowls—5 entries:	
First premium, Eugene Sites, West Dover, O	$3 00
Second premium, Eugene Sites, West Dover, O	2 00
Pair Black-breasted Red, chicks—5 entries:	
First premium, Jas. D. Cass, Beloit, Wis	3 00
Second premium Jas. D. Cass, Beloit, Wis	2 00
Pair White, fowls—1 entry:	
First premium, Eugene Sites, West Dover, O	3 00
Pair White, chicks—1 entry:	
No award.	
Pair Brown Red, fowls—2 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Brown Red, chicks—2 entries:	
No award.	
Pair Yellow Duck-Wing, fowls—1 entry:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Gray, fowls—1 entry:	
No award.	
Pair Gray, chicks—2 entries:	
No award.	
Pair Silver Duck-Wing, fowls—1 entry:	
Second premium, Eugene Sites, West Dover, O	2 00
Pair Pile, fowls—2 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Pile, chicks—2 entries:	
No award.	
Pair White Pile, chicks—1 entry:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Black, fowls—2 entries:	
No award.	
Pair Black, chicks—3 entries:	
No award.	
Pair Blue, chicks—1 entry:	
No award.	

LOT 82—BANTAMS.

Pair Sebright, fowls—5 entries:	
First premium, G. M. Emrick, Chicago	$3 00
Second premium, J. R. Brabazon, Delavan. Wis	2 00
Pair Sebright, chicks—7 entries:	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00

Pair Red Pile Game, fowls—2 entries:	
First premium, Eugene Sites, West Dover, O.	$3 00
Second premium, Blenz & Wheelock, Decatur	2 00
Pair Red Pile Game, chicks—2 entries:	
First premium, Eugene Sites, West Dover, O.	3 00
Pair White, chicks—2 entries:	
No award.	
Pair Black, fowls—3 entries:	
Second premium, J. R. Brabazon, Delavan, Wis	2 00
Pair Black, chicks—2 entries:	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00
Pair Pekin or Cochin, fowls—1 entry:	
First premium, G. M. Emrick, Chicago	3 00
Pair Pekin or Cochin, chicks—1 entry:	
First premium, G. M. Emrick, Chicago	3 00
Pair Japan, chicks—1 entry:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Black Red Game, fowls—3 entries:	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Black Red Game, chicks—8 entries:	
First premium, T. K. Bobb, Decatur	3 00
Second premium, Chas. Marley, Chicago	2 00
Pair Brown-Breasted Game, fowls—1 entry:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Brown-Breasted Game, chicks—1 entry:	
Second premium, Eugene Sites, West Dover, O	2 00
Pair Duck-Wing, fowls—2 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Duck-Wing, chicks—3 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00

LOT 83—MISCELLANEOUS.

Pair Frizzlies, fowls—4 entries:	
First premium, Eugene Sites, West Dover, O	$3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Frizzlies, chicks—3 entries:	
First premium, P. A. Bartlett, Jacksonville	3 00
Pair Silkies, chicks—1 entry:	
First premium, Eugene Sites, West Dover, O	3 00
Pair Pea-Fowls—3 entries:	
First premium, E. Peck & Sons, Geneva	3 00
Second premium, E. Peck & Sons, Geneva	2 00
Langshan, fowl—2 entries:	
First premium, Jas. D. Cass, Beloit, Wis	3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00
Langshan, chick—3 entries:	
First premium, W. V. R. Powers, Chicago	3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00

LOT 84—GUINEAS.

Pair White, fowls—2 entries:	
No award.	
Pair Common, fowls—4 entries:	
First premium, P. A. Bartlett, Jacksonville	$3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00

Pair Common, chicks—3 entries:	
First premium, Jas. D. Cass, Beloit, Wis	$3 00
Second premium, Jas. D. Cass, Beloit, Wis	2 00

Lot 85—Turkeys.

Pair Bronze, fowls—2 entries:	
First premium, P. A. Bartlett, Jacksonville	$4 00
Second premium, Henry Davis, Dyer, Ind	2 00
Pair Bronze, chicks—7 entries:	
First premium, J. R. Brabazon, Delavan, Wis	4 00
Second premium, Henry Davis, Dyer, Ind	2 00
Pair Black, fowls—2 entries:	
No award.	
Pair Black, chicks—4 entries:	
First premium, J. R. Brabazon, Delavan, Wis	4 00
Second premium, G. M. Emrick, Chicago	2 00
Pair Slate, fowls—2 entries:	
First premium, G. M. Emrick, Chicago	4 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Slate, chicks—2 entries:	
No award.	
Pair Buff, fowls—1 entry:	
First premium, G. M. Emrick, Chicago	4 00
Pair Buff, chicks—1 entry:	
Second premium, G. M. Emrick, Chicago	2 00
Pair White, fowls—4 entries:	
First premium, J. R. Brabazon, Delavan, Wis	4 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair White, chicks—3 entries:	
First premium, P. A. Bartlett, Jacksonville	4 00
Second premium, G. M. Emrick, Chicago	2 00
Display of Turkeys—3 entries:	
Premium, G. M. Emrick, Chicago	10 00

Lot 86—Ducks.

Pair Aylesbury—6 entries:	
First premium, J. R. Brabazon, Delavan, Wis	$3 00
Second premium, G. M. Emrick, Chicago	2 00
Pair Rouen—6 entries:	
First premium, G. M. Emrick, Chicago	3 00
Second premium, Blenz & Wheelock, Decatur	2 00
Pair Cayuga—3 entries:	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Second premium, G. M. Emrick, Chicago	2 00
Pair White Muscovey—3 entries:	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Colored Muscovey—5 entries:	
First premium, P. A. Bartlett, Jacksonville	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair White Crested—6 entries:	
First premium, J. R. Brabazon, Delavan, Wis	3 00
Second premium, Eugene Sites, West Dover, O	2 00
Pair Pekin—10 entries:	
First premium, Eugene Sites, West Dover, O	3 00
Second premium, J. R. Brabazon, Delavan, Wis	2 00

Pair Call—6 entries:	
First premium, G. M. Emrick, Chicago	$3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Display of Ducks—5 entries:	
Premium, J. R. Brabazon, Delavan, Wis	10 00

Lot 87—Geese.

Pair Embden—6 entries:	
First premium, Eugene Sites, West Dover, O.	$4 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Toulouse—8 entries:	
First premium, J. R. Brabazon, Delavan, Wis	4 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair White China—4 entries:	
First premium, P. A. Bartlett, Jacksonville	4 00
Second premium, Blenz & Wheelock, Decatur	2 00
Pair African—3 entries:	
First premium, P. A. Bartlett, Jacksonville	4 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Display of Geese—4 entries:	
Premium, P. A. Bartlett, Jacksonville	10 00

Lot 88—Rabbits.

Pair White Angoras—1 entry:	
First premium, P. A. Bartlett, Jacksonville	$3 00
Pair Himalay—2 entries:	
First premium, P. A. Bartlett, Jacksonville	3 00
Second premium, P. A. Bartlett, Jacksonville	2 00
Pair Dutch—1 entry:	
First premium, P. A. Bartlett, Jacksonville	3 00
Pair English—1 entry:	
First premium, P. A. Bartlett, Jacksonville	3 00

Lot 89—Ferrets.

Pair American White—3 entries:	
First premium, Wm. Hawkes, Chicago	$3 00
Second premium, Eugene Sites, West Dover, O.	2 00

Lot 90—Pigeons.

Display of Pigeons, not less than 10 varieties—5 entries:	
First premium, Blenz & Wheelock, Decatur	$10 00
Second premium, P. A. Bartlett, Jacksonville	5 00

Judges, Class E—Phil M. Springer, Springfield; S. S. Reynolds, Carlinville.

CLASS F—MECHANIC ARTS.

E. E. CHESTER, *Superintendent.*

No premiums awarded in this Class, but every facility afforded for exhibition.

Lot 91—Stoves, Castings, Worked Metals, etc.

Lot 92—Household Furniture.

Lot 93—Dairy Utensils.

Lot 94—Manufactures of Various Kinds.

Lot 95—Leather, etc.

Lot 96—Sewing and Knitting Machines and Spinning Wheels.

Lot 97—Miners' Tools, Coal Mining Machinery and Appliances.

CLASS G—FARM PRODUCTS.

JOSEPH SKEAVINGTON, *Superintendent.*

Lot 98—Grains and Seeds.

Bushel White Winter Wheat—4 entries:	
First premium, Hiram Sibley & Co., Chicago	$10 00
Second premium, C. E. Angell, Oshkosh, Wis	5 00
Bushel Red Winter Wheat—5 entries:	
First premium, D. Woodman, Paw Paw, Mich	10 00
Second premium, Hiram Sibley & Co., Chicago	5 00
Bushel Red Spring Wheat—5 entries:	
First premium, C. E. Angell, Oshkosh, Wis	10 00
Second premium, Robt. Shedden, Udina	5 00
Bushel Rye—5 entries:	
First premium, D. Woodman, Paw Paw, Mich.	5 00
Second premium, J. C. Vaughan, Chicago	3 00
Bushel Oats—8 entries:	
First premium, Hiram Sibley & Co., Chicago	5 00
Second premium, C. E. Angell, Oshkosh, Wis	3 00
Bushel Fall Barley—2 entries:	
Second premium, C. E. Angell, Oshkosh, Wis	3 00
Bushel Spring Barley—4 entries:	
First premium, Hiram Sibley & Co., Chicago	5 00
Second premium, D. Woodman, Paw Paw, Mich	3 00
Bushel White Indian Corn, in ear—7 entries:	
First premium, W. Hodge, Morris	5 00
Second premium, J. C. Vaughan, Chicago	2 00
Bushel Yellow Indian Corn, in ear—10 entries:	
First premium, J. C. Vaughan, Chicago	5 00
Second premium, H. P. Edmonds, Taylor	3 00
Field Corn, 5 or more stalks—8 entries:	
First premium, John J. Hunt, Joliet	3 00
Second premium, W. Hodge, Morris	2 00
Peck Pop-corn—3 entries:	
First premium, J. C. Vaughan, Chicago	3 00
Second premium, Robert Shedden, Udina	2 00
Half Bushel Sweet Corn—3 entries:	
First premium, Robert Shedden, Udina	3 00
Second premium, J. C. Vaughan, Chicago	2 00
Bushel Buckwheat—6 entries:	
First premium, C. E. Angell, Oshkosh, Wis	5 00
Second premium, Robert Shedden, Udina	2 00
Bushel Timothy Seed—4 entries:	
First premium, C. E. Angell, Oshkosh, Wis.	5 00
Second premium, J. C. Vaughan, Chicago	2 00

Bushel Clover Seed—3 entries:

First premium, C. E. Angell, Oshkosh, Wis.	$5 00
Second premium, J. C. Vaughan, Chicago	2 00

Bushel Blue-Grass Seed—2 entries:

First premium, Hiram Sibley & Co., Chicago	5 00
Second premium, J. C. Vaughan, Chicago	2 00

Bushel Orchard-Grass Seed—2 entries:

Second premium, J. C. Vaughan, Chicago	2 00

Bushel Flax Seed—3 entries:

First premium, J. C. Vaughan, Chicago	5 00
Second premium, C. E. Angell, Oshkosh, Wis	2 00

Bushel Red-Top Grass Seed—3 entries:

First premium, Hiram Sibley & Co., Chicago	5 00
Second premium, J. C. Vaughan, Chicago	2 00

Bale Broom-Corn—2 entries:

First premium, C. E. Angell, Oshkosh, Wis	5 00
Second premium, C. E. Angell, Oshkosh, Wis	2 00

Half Bushel White Field Beans—5 entries:

First premium, C. E. Angell, Oshkosh, Wis.	5 00
Second premium, R. Ogden & Son, Cameron	2 00

Peck Lima Beans—1 entry:

First premium, W. B. Lloyd, Prospect Park	5 00

Best and Greatest Variety Garden Peas—3 entries:

Premium, Hiram Sibley & Co., Chicago	2 00

Bushel Castor Beans—1 entry:

Premium, Hiram Sibley & Co., Chicago	10 00

Largest and Best Display of Grains and Seeds by one person—samples distinct from the foregoing—one quart of Grain and one pint of Seed—4 entries:

Premium, Hiram Sibley & Co., Chicago	30 00

Awarding Committee—Jacob Miller, Millbourn; August Lucke, Wordworth; D. Q. Trotter, Piasa.

LOT 99—SEED CORN.

Bushel Seed Corn (in ear) grown in Northern Division of the State:

First premium, F. M. Bander, New Milford	$100 00
Second premium, John J. Hunt, Joliet	50 00

Bushel Seed Corn (in ear) grown in Central Division:

First premium, E. A. Vittum, Canton	100 00
Second premium, J. R. Megginson, Jacksonville	50 00

Awarding Committee—W. A. J. Pierce, Mt. Carroll; George C. Morgan, Chesterton, Ind.; E. L. Byington, Lanark.

Bushel Seed Corn (in ear) grown in Southern Division:

First premium, W. R. Crain, Villa Ridge	$100 00
Second premium, E. P. Kellenberger, Melville	50 00

Awarding Committee—J. M. Bechtel, Freeport; H. P. Edmonds, Taylor; James T. Johnson, Warsaw.

LOT 100—VEGETABLES.

Bushel Early Irish Potatoes:

First premium, M. Carter, Oak Park	$5 00
Second premium, J. C. Vaughan, Chicago	3 00

Bushel Late Irish Potatoes:

First premium, J. C. Vaughan, Chicago	5 00
Second premium, Robert Shedden, Udina	3 00

Bushel Sweet Potatoes:

First premium	5 00

Bushel Onions:

First premium, M. Carter, Oak Park	4 00
Second premium, J. C. Vaughan, Chicago	2 00

Bushel Table Turnips:	
First premium, J. C. Vaughan, Chicago	$4 00
Bushel Table Beets:	
First premium, J. C. Vaughan, Chicago	4 00
Second premium, Robert Shedden, Udina	2 00
Bushel Mangel-Wurzels:	
First premium, J. C. Vaughan, Chicago	4 00
Second premium, Robert Shedden, Udina	2 00
Bushel Table Parsnips:	
First premium, J. C. Vaughan, Chicago	4 00
Celery—12 stalks:	
First premium, J. C. Vaughan, Chicago	4 00
Three varieties Cabbage—6 heads each:	
Second premium, W. M. Johnston & Co., Chicago	4 00
Peck Tomatoes:	
First premium, C. Elsom, Oak Park	4 00
Second premium, Robert Shedden, Udina	2 00
Six Pumpkins:	
First premium, J. C. Vaughan, Chicago	4 00
Second premium, S. R. Davis, Bristol	2 00
Six Squashes:	
First premium, J. C. Vaughan, Chicago	4 00
Second premium, E. Elsom, Oak Park	2 00
Six Muskmelons:	
First premium, M. Carter, Oak Park	4 00
Second premium, E. Elsom, Oak Park	2 00
Half Bushel Carrots:	
First premium, M. Carter, Oak Park	5 00
Second premium, J. C. Vaughan, Chicago	3 00
Six Egg-plant fruit:	
First premium, Chas. H. Dolton, Dolton	4 00
Second premium, M. Carter, Oak Park	2 00
Variety Garden Seeds—named:	
First premium, Hiram Sibley & Co., Chicago	10 00
Second premium, J. C. Vaughan, Chicago	5 00
Bushel Sugar Beets:	
First premium, J. C. Vaughan, Chicago	5 00
Second premium, Robert Shedden, Udina	3 00
Display Garden Vegetables—twenty or more varieties, samples distinct from foregoing:	
First premium, J. C. Vaughan, Chicago	10 00
Second premium, Robert Shedden, Udina	5 00
Display Garden Seeds:	
First premium, Hiram Sibley & Co., Chicago	20 00
Second premium, J. C. Vaughan, Chicago	10 00
Display Irish Potatoes—twenty-five or more varieties:	
Premium, Robert Shedden, Udina	Diploma

Awarding Committee—P. C. McDonald, Walnut; Joseph Rick, Lake Geneva, Wis.; Jas. T. Johnson, Warsaw.

LOT 101—BUTTER, CHEESE, ETC.

Butter made at any time during year—10 pounds:	
First premium, Geo. F. Davis & Co., Dyer, Ind	$10 00
Second premium, D. C. Wolverton, Belvidere	5 00
Butter made in May or June—10 pounds:	
First premium, Geo. F. Davis & Co., Dyer, Ind.	10 00
Second premium, Geo. F. Davis & Co., Dyer, Ind	5 00
Fresh Butter—10 pounds:	
First premium, D. C. Wolverton, Belvidere	10 00
Second premium, A. Hays, Belvidere	5 00
Display of Butter—distinct from foregoing:	
Premium, D. C. Wolverton, Belvidere	15 00

Cheese—1 year old or over:	
First premium, D. C. Wolverton, Belvidere	$10 00
Second premium, A. Hays, Belvidere	5 00
Cured Cheese—under 1 year old:	
First premium, D. C. Wolverton, Belvidere	10 00
Second premium, A. Hays, Belvidere	5 00
New Cheese:	
First premium, D. C. Wolverton, Belvidere	10 00
Second premium, A. Hays, Belvidere	5 00
Display of Cheese—distinct from foregoing:	
Premium, D. C. Wolverton, Belvidere	15 00

Awarding Committee—Mrs. Joseph Skeavington, Albion; John Swanzey, Ridott; E. L. Byington, Lanark.

LOT 102—BREAD, CAKES, ETC.

Loaf Wheat Bread—hop yeast:	
First premium, Mrs. J. F. Robinson, Atlanta	$4 00
Second premium, Mrs. G. M. Emrick, Chicago	2 00
Loaf Wheat Bread—milk rising:	
First premium, F. S. Mills, Wheaton	4 00
Second premium, Mrs. T. S. Neal, Quincy	2 00
Loaf Bread—unbolted flour:	
First premium, Mrs. J. F. Robinson, Atlanta	4 00
Second premium, Mrs. Laura Trowbridge, Chicago	2 00
Loaf Rye Bread:	
First premium, W. B. Lloyd, Prospect Park	4 00
Second premium, W. B. Lloyd, Prospect Park	2 00
Loaf Corn Bread:	
First premium, Mrs. A. Patrick, Marengo	4 00
Second premium, Mrs. Z. E. P. Guzeman, Chicago	2 00
Sponge Cake:	
First premium, E. H. Johnson & Bro., Chicago	4 00
Second premium, Mrs. R. J. Woodruff, Chicago	2 00
Snow Cake:	
First premium, Mrs. G. M. Emrick, Chicago	4 00
Second premium, Mrs. Z. E. P. Guzeman, Chicago	2 00
Pound Cake:	
First premium, W. B. Lloyd, Prospect Park	4 00
Second premium, Mrs. M. H. Thurston, Chicago	2 00
Jelly Cake:	
First premium, S. T. Bronson, Belvidere	4 00
Second premium, E. H. Johnson & Bro., Chicago	2 00
Fruit Cake:	
First premium, Mrs. Emily M. Boyden, Chicago	4 00
Second premium, E. H. Johnson & Bro., Chicago	2 00
Silver Cake:	
First premium, Mrs. J. F. Robinson, Atlanta	4 00
Second premium, S. T. Bronson, Belvidere	2 00
Gold Cake:	
First premium, Mrs. Z. E. P. Guzeman, Chicago	4 00
Second premium, S. T. Bronson, Belvidere	2 00
Nut Cake:	
First premium, S. T. Bronson, Belvidere	4 00
Second premium, Mrs. Z. E. P. Guzeman, Chicago	2 00
Doughnuts:	
First premium, Mrs. Emily M. Boyden, Chicago	4 00
Second premium, Anna Miller, Quincy	2 00
Ginger Cake:	
First premium, Mrs. A. Patrick, Marengo	4 00
Second premium, Mrs. J. F. Robinson, Atlanta	2 00
Marble Cake:	
First premium, Emma Gregory, McHenry	4 00
Second premium, S. T. Bronson, Belvidere	2 00

Orange Cake:	
First premium, Mrs. Z. E. P. Guzeman, Chicago	$4 00
Second premium, S. T. Bronson, Belvidere	2 00
Lemon Cake:	
First premium, Mrs. Z. E. P. Guzeman, Chicago	4 00
Second premium, Mrs. J. F. Robinson, Atlanta	2 00
Cocoanut Cake:	
First premium, S. T. Bronson, Belvidere	4 00
Second premium, Mrs. G. M. Emrick, Chicago	2 00
Queen of the Prairie Cake:	
First premium, Mrs. Z. E. P. Guzeman, Chicago	4 00
Second premium, Mrs. M. H. Thurston, Chicago	2 00
Chocolate Cake:	
First premium, Mrs. M. H. Thurston, Chicago	4 00
Second premium, Mrs. Laura Trowbridge, Chicago	2 00
Quart Sorghum Molasses:	
First premium, Mrs. Celia Keene, Atlanta	3 00
Second premium, Mrs. J. F. Robinson, Atlanta	2 00
Pound Browned Coffee:	
Premium, Mrs. A. Patrick, Marengo	1 00
Can Sweet Corn:	
Premium, Mrs. Celia Keene, Atlanta	2 00
Can Common Corn:	
Premium, Mrs. Celia Keene, Atlanta	2 00

Awarding Committee—Mrs. J. W. Barber, Albion; Mrs. S. A. King, Chicago; Mrs. G. Baker, Albion.

CLASS H.—HORTICULTURE AND FLORICULTURE.

GEO. S. HASKELL, *Superintendent.*

Section 1—Trees, Flowers, Plants, Etc.

LOT 103—TREES, FLOWERS, PLANTS.

For Professional Florists and Dealers.

Collection Cactus, Agave and Aloes:	
Premium, H. S. Hackman, Peru	$10 00
Collection Echeverias and Succulents:	
Premium, H. S. Hackman, Peru	5 00
Most showy varieties Rex Begonias:	
Premium, Geo. Wittbolds, Lake View	5 00
Collection Winter-flowering Begonias:	
Premium, H. S. Hackman, Peru	5 00
Largest Collection Geraniums in flower:	
Premium, H. S. Hackman, Peru	15 00
Six varieties single Geranium:	
Premium, H. S. Hackman, Peru	5 00
Six varieties double Geranium:	
Premium, H. S. Hackman, Peru	5 00
Collection Foliage and Variegated Geraniums:	
Premium, H. S. Hackman, Peru	5 00
New Seedling Geranium:	
Premium, D. S. Heffron, Washington Heights .... Silver Medal and	5 00
Single Specimen Plant, any kind:	
Premium, Geo. Wittbolds, Lake View	10 00
Collection Palms:	
Premium, Geo. Wittbolds, Lake View	10 00

Single Palm:	
Premium, Geo. Wittbolds, Lake View	$5 00
Collection Ferns:	
Premium, Geo. Wittbolds, Lake Niew	10 00
Croton:	
Premium, H. S. Hackman, Peru	5 00
Collection Bulbs—correctly named:	
Premium, J. C. Vaughan, Chicago	Silver Medal.
New and Meritorious Plant:	
Premium, D. S. Heffron, Washington Heights	Diploma.

Awarding Committee—James Crow, Crystal Lake; A. W. Sawyer, Sycamore; Chas. W. Haskell, Rockford.

LOT 104—CUT FLOWERS.

For Professional Florists only.

Collection Cut Flowers:	
First premium, F. A. Baller, Bloomington	$15 00
Second premium, W. A. Burdick & Co., Rockford	6 00
Collection of Asters:	
First premium, W. A. Burdick & Co., Rockford	10 00
Collection of Dahlias—named:	
First premium, F. A. Baller, Bloomington	10 00
Second premium, D. S. Heffron, Washington Heights	6 00
Collection of 18 Dahlias—dissimilar bloom:	
First premium, F. A. Baller, Bloomington	5 00
Second premium, W. A. Burdick & Co., Rockford	3 00
Collection of Pompone or Bouquet Dahlias:	
First premium, D. S. Heffron, Washington Heights	5 00
Second premium, W. A. Burdick & Co., Rockford	3 00
Single Dahlia:	
First premium, D. S. Heffron, Washington Heights	3 00
Seedling Dahlia:	
First premium, D. S. Heffron, Washington Heights	Dip.
Display of Dianthus:	
First premium, W. A. Burdick & Co., Rockford	8 00
Collection of Everlastings:	
First premium, J. C. Vaughan, Chicago	Dip.
Collection of Grasses:	
First premium, J. C. Vaughan, Chicago	Dip.
Display of Cut Roses:	
First premium, F. A. Baller, Bloomington	15 00
Second premium, J. C. Vaughan, Chicago	10 00
Collection of Gladioli;	
First premium, F. A. Baller, Bloomington	10 00
Second premium, J. C. Vaughan, Chicago	6 00
Collection of Pansies:	
First premium, Wm. Toole, North Freedom, Wis.	8 00
Second premium, W. A. Burdick & Co., Rockford	5 00
Collection Phlox Drummondii:	
First premium, W. A. Burdick & Co., Rockford	8 00
Collection Tube Roses, cut stalks:	
First premium, J. C. Vaughan, Chicago	6 00
Collection Verbenas:	
First premium, W. A. Burdick & Co., Rockford	10 00
Collection of Geraniums:	
First premium, F. A. Baller, Bloomington	10 00
Second premium, H. S. Hackman, Peru	6 00

Collection Double Zinnias:	
First premium, W. A. Burdick & Co., Rockford	$5 00
Collection Double Petunias:	
First premium, W. A. Burdick & Co., Rockford	6 00
Collection Single Petunias:	
First premium, W. A. Burdick & Co., Rockford	6 00
Collection Cut Flowers, including above:	
First premium, W. A. Burdick & Co., Rockford	Dip.

FLORAL DESIGNS, BOUQUETS, ETC.

Floral Design:	
First premium, Hovey & Co., Chicago	$35 00
Second premium, J. C. Vaughan, Chicago	25 00
Third premium, Al. C. Helmuth, Chicago	15 00
Floral Wreath:	
Premium, J. C. Vaughan, Chicago	8 00
Pair round Hand Bouquets:	
Premium, J. C. Vaughan, Chicago	8 00
Basket Cut Flowers:	
Premium, J. C. Vaughan, Chicago	10 00
Basket Cut Roses:	
Premium, J. C. Vaughan, Chicago	10 00
Pair Bouquets of Grasses:	
Premium, J. C. Vaughan, Chicago	5 00
Bouquet of Winter Flowers:	
Premium, J. C. Vaughan, Chicago	5 00
Pair Bridal Bouquets:	
Premium, J. C. Vaughan, Chicago	8 00
Harp of Lyre:	
Premium, J. C. Vaughan, Chicago	8 00
Cross:	
Premium, Hovey & Co., Chicago	8 00
Crown:	
Premium, J. C. Vaughan, Chicago	10 00
General Display of Floral Work:	
Premium, J. C. Vaughan, Chicago	S. M. & 20 00

Awarding Committee.—Mrs. R. S. Payne, Chicago; C. K. Luce, Normal Park; A. W. Sawyer, Sycamore.

LOT 105—CUT FLOWERS, BY AMATEURS.

Collection Cut Flowers:	
First premium, Mrs. C. Hinsey, Pekin	$6 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia.	4 00
Collection of Asters:	
First premium, Mrs. C. Hinsey, Pekin	4 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia.	2 00
Collection of Balsams:	
First premium, Mrs. C. Hinsey, Pekin	4 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia.	2 00
Collection of Dahlias—6 or more varieties:	
First premium, Mrs. Jas. Davidson, Monticello, Ia.	4 00
Second premium, Mrs. C. Hinsey, Pekin	3 00
Collection of Dahlias—Bouquet or Pompone.	
First premium, Mrs. Jas. Davidson, Monticello, Ia.	3 00
Second premium, Mrs. C. Hinsey, Pekin	2 00
Collection of Everlastings:	
First premium, Mrs. C. Hinsey, Pekin	3 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia.	2 00

Collection of Gladioli:

First premium, Mrs. C. Hinsey, Pekin	$5 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia.	3 00

Collection Japan Pinks:

First premium, Mrs. C. Hinsey, Pekin	4 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia.	3 00

Collection Single Petunias:

First premium, Helen Lewis, Chicago	4 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia	3 00

Collection Double Petunias:

First premium, Mrs. C. Hinsey, Pekin	4 00

Collection of Pansies:

First premium, Mrs. C. Hinsey, Pekin	4 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia	3 00

Collection Phlox Drummondii:

First premium, Mrs. C. Hinsey, Pekin	4 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia.	3 00

Collection Tube Roses:

First premium, Mrs. Jas. Davidson, Monticello, Ia.	2 00
Second premium, Mrs. C. Hinsey, Pekin	1 00

Collection Verbenas:

First premium, Mrs. Jas. Davidson, Monticello, Ia	4 00

Double Zinnia:

First premium, Mrs. C. Hinsey, Pekin	3 00

Floral Designs, Bouquets, etc.

Floral Design:

First premium, Maud Hinsey, Pekin	$15 00
Second premium, Maud Hinsey, Pekin	12 00
Third premium, Mrs. Jas. Davidson, Monticello, Ia	10 00

Floral Design of Dahlias:

Premium, Maud Hinsey, Pekin	4 00

Floral Pyramid or Mound:

Premium, Mrs. James Davidson, Monticello, Ia	4 00

Floral Wreath:

Premium, Maud Hinsey, Pekin	4 00

Pair Flat Hand Bouquets:

First premium, Maud Hinsey, Pekin	4 00
Second premium, Mrs. Jas. Davidson, Monticello, Ia	2 00

Pair Round Hand Bouquets:

First premium, Mrs. Jas. Davidson, Monticello, Ia.	4 00
Second premium, Maud Hinsey, Pekin	2 00

Pair Grass Bouquets:

First premium, Mrs. C. Hinsey, Pekin	4 00

Basket Cut Flowers:

First premium, Maud Hinsey, Pekin	4 00
Second premium, Mrs. James Davidson, Monticello, Ia.	3 00

Winter Basket of Flowers, Leaves and Mosses:

First premium Mrs. C. Hinsey, Pekin	3 00
Second premium, Anna Miller, Quincy	2 00

Pair Winter Bouquets:

First premium, Mrs. C. Hinsey, Pekin	3 00
Second premium, Mrs. J. Nearing, Kenney	2 00

Floral Heart:

Premium, Maud Hinsey, Pekin	4 00

Floral Star:

Premium, Maud Hinsey, Pekin	4 00

Awarding Committee—Ida L. Jones, Waukegan; A. W. Sawyer, Sycamore; Chas. W. Haskell, Rockford.

CLASS H—SECTION II—FRUITS, ETC.

LOT 106—HOME-GROWN FRUITS.

For Professional Fruit Growers and Orchardists.

Collection of Fruits by a Horticultural Society:	
First premium, South Haven and Casco Pomological Society, South Haven, Mich.	$75 00
Second premium, Warsaw Horticultural Society, Warsaw	40 00
Third premium, H. M. Dunlap, Savoy	20 00
Collection of Apples (Crabs excepted)—25 varieties:	
First premium, L. H. Bailey, South Haven, Mich	20 00
Second premium, Jas. T. Johnson, Warsaw	15 00
Collection Apples for Southern Illinois—15 varieties:	
First premium, W. R. Crain, Villa Ridge	15 00
Second premium, G. H. Baker, Cobden	10 00
Collection Apples for Central Illinois—15 varieties:	
First premium, Jas. T Johnson, Warsaw	15 00
Second premium, A. C. Hammond, Warsaw.	10 00
Collection Apples for Northern Illinois—15 varieties:	
First premium, Arthur Bryaat, Princeton	15 00
Siberian Crab Apples—5 varieties:	
First premium, Jas. T. Johnson, Warsaw	3 00
Second premium, Robert Shedden, Udina	2 00
Collection of Pears, product of Illinois—6 varieties:	
First premium, E. Hollister, Alton	10 00
Second premium, H. M. Dunlap, Savoy	6 00
Collection Autumn Pears, product of Illinois—5 varieties:	
First premium, E. Hollister, Alton	5 00
Second premium, H. M. Dunlap, Savoy	3 00
Collection Winter Pears, product of Illinois—3 varieties:	
First premium, H. M. Dunlap, Savoy	5 00
Second premium, Jas. T. Johnson, Warsaw	3 00
Collection of Peaches, named—6 varieties:	
First premium, O. Beebe, South Haven, Mich	5 00
Collection of Plums—3 varieties:	
First premium, A. G. Gulley, South Haven, Mich	5 00
Second premium, Jas. T. Johnson, Warsaw	3 00
Display of Grapes, correctly named:	
First premium, O. Beebe, South Haven, Mich,	15 00
Second premium, D. S. Heffron, Washington Heights	10 00
Early Grapes—3 bunches:	
First premium, D. S. Heffron, Washington Heights	4 00
Second premium, O. Beebe, South Haven, Mich	2 00
Display of Fruits:	
Premium, H. M. Dunlap, Savoy	15 00

Awarding Committee—Samuel Edwards, Mendota; A. R. Whitney, Franklin Grove; E. A. Riehl, Alton.

LOT 107—HOME-GROWN FRUITS.

By Farmer or Amateur.

Collection of Apples—10 varieties:	
First premium, L. Thing, Cobden	$10 00
Second premium, H. C. Smith, Tolono	5 00
Collection of Apples—6 varieties:	
First premium, H. C. Smith, Tolono	5 00
Second premium, L. Thing, Cobden	3 00
Collection of Pears:	
First premium, L. Thing, Cobden	3 00
Second premium, H. C. Smith, Tolono	2 00
Early Grapes—4 bunches:	
First premium, J. V. N. Standish, Galesburg	4 00
Second premium, J. V. N. Standish, Galesburg	2 00

Three varieties Late Grapes for table use—3 bunches each:	
First premium, J. V. N. Standish, Galesburg	$4 00
Second premium, J. V. N. Standish, Galesburg	2 00
Three varieties Wine Grapes—3 bunches each:	
First premium, J. V. N. Standish, Galesburg	4 00
Second premium, J. V. N. Standish, Galesburg	2 00
Eight varieties of Apples for Southern Illinois:	
First premium, L. Thing, Cobden	6 00
Eight varieties of Apples for Central Illinois:	
First premium, H. C. Smith, Tolono	6 00
Eight varieties of Apples for Northern Illinois:	
First premium, Mrs. A. Patrick, Marengo	6 00
Second premium, Robert Shedden, Udina	4 00
Display of Grapes:	
First premium, J. V. N. Standish, Galesburg	6 00
Second premium, J. V. N. Standish, Galesburg	4 00

Awarding Committee—W. R. Parkin, Galva; F. W. Baker, Champaign; A. G. Gulley, South Haven, Mich.

Lot 108—Jellies, Preserves, Pickles, Etc.

Six or more varieties Fruit Jelly:	
First premium, Celia Keene, Atlanta	$8 00
Second premium, Mrs. J. F. Robinson, Atlanta	5 00
Six or more varieties Small Fruit Jelly:	
First premium, Celia Keene, Atlanta	8 00
Second premium, Mrs. O. A. Sargent, Windsor	5 00
Display of Jellies not entered for other premiums:	
First premium, Celia Keene, Atlanta	15 00
Second premium, Mrs. J. F. Robinson, Atlanta	10 00
Six or more varieties Canned Fruit:	
First premium, Mrs. J. F. Robinson, Atlanta	8 00
Second premium, Celia Keene, Atlanta	5 00
Six or more varieties Canned Small Fruits:	
First premium, Celia Keene, Atlanta	8 00
Second premium, Mrs. J. F. Robinson, Atlanta	5 00
Display of Canned Fruits not entered for other premiums:	
First premium, Celia Keene, Atlanta	20 00
Second premium, Mrs. J. F. Robinson, Atlanta	15 00
Ten or more varieties Preserved Fruits:	
First premium, Mrs. J. F. Robinson, Atlanta	12 00
Second premium, Celia Keene, Atlanta	8 00
Six or more varieties Fruit Butter:	
First premium, Mrs. J. F. Robinson, Atlanta	7 00
Second premium, Celia Keene, Atlanta	5 00
Six or more varieties of Jam:	
First premium, Celia Keene, Atlanta	7 00
Second premium, Mrs. J. F. Robinson, Atlanta	5 00
Ten or more varieties Sour Pickles:	
First premium, Celia Keene, Atlanta	8 00
Second premium, Mrs. J. F. Robinson, Atlanta	6 00
Five or more varieties Sauces, Relishes, Catsups, Etc.:	
First premium, Mrs. J. F. Robinson, Atlanta	6 00
Second premium, Celia Keene, Atlanta	4 00
Display of Horticultural Implements by manufacturer or agent:	
Premium, Hiram Sibley & Co., Chicago	Diploma and 20 00

Awarding Committee—Mrs. D. R. Frazer, Mt. Carroll; Mrs. Geo. Warrington, Chicago; Belle Chester, Champaign; Mrs. J. Nearing, Kenney.

CLASS I—ARTS.

J. IRVING PEARCE, *Superintendent.*

Lot 109—Fine Arts.

Specimen of Sculpture:	
First premium, Wm. Braddock, Springfield	S. M.
Portrait in Oil, from Sittings:	
First premium, J. J. G. Burghoffer, Chicago	10 00
Second premium, H. L. Bowman, Lamoille	5 00
Illinois Landscape in Oil, from Nature:	
First premium, J. J. G. Burghoffer, Chicago	20 00
Second premium, Julia Hunt, Galesburg	10 00
Landscape in Oil, from Nature:	
First premium, J. J. G. Burghoffer, Chicago	20 00
Second premium, V. E. Day, Chicago	10 00
Landscape in Oil, Copy:	
First premium, J. J. G. Burghoffer, Chicago	10 00
Second premium, Chas. Kellermann, Chicago	5 00
Animal Painting in Oil, from Life:	
First premium, G. S. Truesdale, Chicago	10 00
Second premium, O. A. Barnes, Chicago	5 00
Animal Painting in Oil, Copy:	
First premium, G. S. Truesdale, Chicago	5 00
Second premium, Mrs. O. G. Ventres, Chicago	3 00
Fruit Painting in Oil:	
First premium, V. E. Day, Chicago	10 00
Second premium, Mrs. O. G. Ventres, Chicago	5 00
Flower Painting in Oil:	
First premium, C. M. Hills, Chicago	10 00
Second premium, Mrs. M. A. Davenport, Chicago	5 00
Painting in Oil, other than above:	
First premium, J. J. G. Burghoffer, Chicago	10 00
Second premium, H. L. Bowman, Lamoille	5 00
Portrait in Water Colors, from Sittings;	
First premium, Abbie Morfoot, Englewood	10 00
Landscape in Water Colors:	
First premium, J. J. G. Burghoffer, Chicago	6 00
Second premium, G. S. Truesdale, Chicago	4 00
Flower Piece in Water Colors:	
First premium, F. S. Mills, Wheaton	6 00
Painting in Water Colors, other than above:	
First premium, J. J. G. Burghoffer, Chicago	5 00
Charcoal Sketch in Crayon, from Nature:	
First premium, H. L. Bowman, Lamoille	3 00
Second premium, Helen A. Lewis, Chicago	2 00
Pencil Drawing, from Nature:	
First premium, J. J. G. Burghoffer, Chicago	5 00
Second premium, F. S. Mills, Wheaton	3 00
Pencil Drawing, Copy:	
First premium, J. J. G. Burghoffer, Chicago	2 00
Second premium, Herman Hanstein, Chicago	1 00
Display of Oil Paintings:	
First premium, J. J. Burghoffer, Chicago	40 00
Second premium, V. E. Day, Chicago	25 00
Third premium, Julia Hunt, Galesburg	15 00
Display of Paintings in Water Colors:	
First premium, J. J. Burghoffer, Chicago	15 00

Awarding Committee—Joseph Utley, Dixon; R. G. Gibson, Mason; J. K. Pumpelly, Chicago.

LOT 110—DECORATIVE ART.

Painting on Satin, (Oil).	
First premium, Mrs. F.Johnson, Chicago	$5 00
Second premium, Mrs. Laura Trowbridge, Chicago	3 00
Painting on Velvet or Plush:	
First premium, Mrs. J. H. Hewitt, Chicago	5 00
Second premium, Miss Helen A. Lewis, Chicago	3 00
Kensington Painting:	
First premium, Celia Keene, Atlanta	4 00
Second premium, Mrs. J. H. Hewitt, Chicago	2 00
Painted Face:	
First premium, W. F. Hatch, Peoria	3 00
Second premium, Jennie Dunsmore, Greensburg, Ind	1 00
Flower or Fruit Painting, on China:	
First premium, Jennie Dunsmore, Greensburg, Ind	3 00
Second premium, F. S. Mills, Wheaton	2 00
Painted or Decorated China Placque:	
First premium, Fannie Keeler, Chicago	3 00
Second premium, Ida Charon, Chicago	2 00
Painted Placque:	
First premium, Helen W. Boyden, Chicago	3 00
Second premium, Fannie Keeler, Chicago	2 00
Painted Tile:	
First premium, Fannie Keeler, Chicago	3 00
Second premium, Fannie Keeler, Chicago	2 00
Painted Fire Screen:	
First premium, Sarah Merritt, Chicago	3 00
Second premium, Mrs. J. H. Hewitt, Chicago	2 00
Painted Panel:	
First premium, Fannie Keeler, Chicago	3 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Painted Sofa Pillow:	
First premium, Mrs. J. H. Hewitt, Chicago	3 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Painted Tidy:	
First premium, Mrs. A. Patrick, Marengo	3 00
Second premium, Mrs. F. Johnson, Chicago	2 00
Painted Lambrequin:	
First premium, Mrs. J. H. Hewitt, Chicago	3 00
Second premium, Mrs. Laura Trowbridge, Chicago	2 00
Painted Toilet Set:	
First premium, Mrs. Laura Trowbridge, Chicago	3 00
Second premium, Mrs. A. Patrick, Marengo	2 00
Painted Stand Cover:	
First premium, Mrs. J. H. Hewitt, Chicago	3 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Painting on Pottery:	
First premium, Jennie Dunsmore, Greensburg, Ind	3 00
Second premium, Mrs, O. G. Ventres, Chicago	2 00
Landscape Painting on China:	
First premium, Fannie Keeler, Chicago	4 00
Second premium, F. S. Mills, Wheaton	2 00
Etching on Linen:	
First premium, Mrs. Jennie Taggart, Decatur	3 00
Second premium, Mrs. L. E. Rockwell, Quincy	2 00
Etching on China:	
First premium, F. S. Mills, Wheaton	3 00
Display of articles named in this lot:	
First premium, Fannie Keeler, Chicago	20 00
Second premium, F. S. Mills, Wheaton	10 00

Awarding Committee—Mrs. T. McD. Richards, Woodstock; Mrs. M. T. Stookey, Belleville; Luther L. Hiatt, Wheaton.

Lot 111—Photography, Etc.

No premiums awarded in this Lot, but every facility afforded for exhibition.

CLASS K—TEXTILE FABRICS.

H. G. SAVAGE, *Superintendent.*

Lot 112—Manufactured Goods.

Display Mixed Cotton and Woolen Goods:	
Premium, Hammill & Laskie, Chicago	Diploma.
Display of Men's Clothing:	
Premium, James Wilde, Jr., Chicago	Diploma.

TO BE THE HANDIWORK OF THE EXHIBITER.

Pair of Blankets:	
First premium, Mrs. J. Nearing, Kenney	$3 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Pair Ladies' Stockings—Wool:	
First premium, Mrs. J. Nearing, Kenney	3 00
Second premium, Mrs. Susan Jones, Mt. Sterling	2 00
Pair Ladies' Stockings—Cotton:	
First premium, Mrs. L. E. Rockwell, Quincy	3 00
Second premium, Mrs. J. Nearing, Kenney	2 00
Pair Men's Socks—Wool:	
First premium, Mrs. J. Nearing, Kenney	2 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind.	1 00
Pair Men's Socks—Cotton:	
First premium, Mrs. L. E. Rockwell, Quincy	2 00
Second premium, Mrs. Susan Jones, Mt. Sterling	1 00
Pair Mittens—Wool:	
First premium, Mrs. Z. E. P. Guzeman, Chicago	2 00
Second premium, Mrs. Laura Trowbridge, Chicago	1 00
Pair Mittens—Silk:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Second premium, Mrs. C. Hinsey, Pekin	1 00
Foot-mat—Wool:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. C. Hinsey, Pekin	2 00
Parlor Rug—Wool:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. J. Nearing, Kenney	2 00
Hearth Rug—Wool:	
First premium, Mrs. J. Nearing, Kenney	3 00
Second premium, Amelia Berning, Oak Park	2 00
Hearth Rug—Rags:	
First premium, Dora Cross, Albion, Pa	3 00
Second premium, Mrs. J. C. Skeen, Chicago	2 00
Carriage Mat:	
First premium, Mrs. Jennie Taggart, Decatur	3 00
Second premium, Mrs. P. S. Neal, Quincy	2 00
Pair Woolen Sheets:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. J. Nearing, Kenney	2 00
Pair Linen Sheets:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Lady's Dress:	
First premium, Mrs. Jennie Taggart, Decatur	3 00
Second premium, Anna Miller, Quincy	2 00

Child's Dress:	
First premium, Mrs. Jno. P. Henderson, Virden	$3 00
Second premium, Maud Hinsey, Pekin	2 00
Suit of Boy's Clothes:	
First premium, Mrs. P. S. Neal, Quincy	3 00
Second premium, Anna Miller, Quincy	2 00
Hand-made Shirt:	
First premium, Mrs. E. L. Gillham, Merritt	3 00
Second premium, Mrs. J. Nearing, Kenney	2 00
Machine-made Shirt:	
First premium, Mrs. L. E. Rockwell, Quincy	2 00
Second premium, Mrs. J. Nearing, Kenney	1 00
Quilted Silk Skirt:	
Second premium, Mrs. P. D. Stagg, Greensburg, Ind.	2 00
Pair Curtains, trimmed with Lace:	
First premium, Mrs. A. Patrick, Marengo	3 00
Collection of Knitting—Socks and Stockings:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind.	3 00
Second premium, Mrs. J. Nearing, Kenney	2 00
Knitted Wool Lace:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind.	2 00
Second premium, Mrs. Susan Jones, Mt. Sterling	1 00
Knitted Cotton Lace:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind.	2 00
Second premium, Mrs. Susan Jones, Mt. Sterling	1 00
Knitted Silk Lace:	
First premium, Mrs. P. S. Neal, Quincy	2 00
Second premium, Mrs. Z. E. P. Guzeman, Chicago	1 00
Sample Plain Sewing embracing different stitches:	
First premium, Maud Hinsey, Pekin	4 00
Second premium, Mrs. J. F. Robinson, Atlanta	2 00
Night Dress:	
First premium, Anna Miller, Quincy	2 00
Second premium, Maud Hinsey, Pekin	1 00
Chemise:	
First premium, Maud Hinsey, Pekin	2 00
Second premium, Anna Miller, Quincy	1 00
Specimen of Drawing and Repairing:	
First premium, Mrs. W. H. Price, Gurne	2 00
Second premium, Mrs. Susan Jones, Mt. Sterling	1 00
Kitchen Apron:	
First premium, Mrs. L. E. Rockwell, Quincy	2 00
Second premium, Ella Wells, Lebanon, Ind	1 00

Awarding Committee—Jessie D. Gillette, Elkhart; Mrs. J. I. Pearce, Chicago; Mrs. M. T. Moody, Chicago.

LOT 113—QUILTS AND PATCHWORK.

Silk Quilt—Patchwork:	
First premium, Mary E. Duncan, Chicago	$4 00
Second premium, Mrs. R. Payne, Chicago	2 00
Silk Quilt—Embroidered:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind.	4 00
Second premium, Mrs. C. Hinsey, Pekin	2 00
Japanese or Fancy Silk Quilt:	
First premium, Annie I. Hymen, Chicago	4 00
Second premium, Mrs. M. T. Moody, Chicago	2 00
Silk Crib Quilt:	
First premium, Mrs. Geo. Mohler, Sterling	3 00
Second premium, Mrs. J. Nearing, Kenney	2 00
Cotton Patchwork Quilt:	
First premium, Celia Keene, Atlanta	4 00
Second premium, Mrs. P. Sanasek, Bourbonnais	2 00

Worsted Patchwork Quilt:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	$4 00
Second premium, Mrs. J. G. Hill, Des Moines, Ia	2 00
Quilt made by lady over 60 years old:	
First premium, Mrs. E. D. Ransom, Belvidere:	4 00
Second premium, Mrs. C. Hinsey, Pekin	2 00
Knitted Cotton Spread:	
First premium, Mrs. C. Hinsey, Pekin	3 00
Second premium, Mrs. Susan Jones, Mt. Sterling	2 00
Log Cabin Quilt:	
First premium, Mrs. Wm. Macklin, Englewood	3 00
Second premium. Mrs. M. F. Heine, Chicago	2 00
White Quilt:	
First premium. Ella Wells, Lebanon, Ind	4 00
Second premium, Celia Keene, Atlanta	2 00
Crochet Spread:	
First premium, Mrs. J. Nearing, Kenney	4 00
Second premium, Maud Hinsey, Pekin	2 00
Worsted Comforter:	
First premium, Mrs. E. L. Gillham, Merritt	3 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Specimen, Quilting:	
First premium, Mrs. J. Nearing, Kenney	2 00
Second premium, Mrs. C. Hinsey, Pekin	1 00
Japanese or Patchwork Sofa Pillow:	
First premium, Anna Miller, Quincy	2 00
Second premium, Maud Hinsey, Pekin	1 00
Japanese or Patchwork Table Cover:	
First premium, Mrs. E. D. Ransom, Belvidere	2 00
Second premium, Mary E. Duncan, Chicago	1 00
Japanese or Patchwork Chair Stripe;	
First premium, Mrs. M. T. Moody, Chicago	2 00

Awarding Committee—Mrs. Ed W. Upham, Waukegan; Mrs. H. C. Marshall, Chicago; Mrs. S. P. Show, Chicago.

Lot 115—Ornamental Needle-work.

Specimen Braiding:	
First premium, Maud Hinsey, Pekin	$3 00
Second premium, Mrs. J. Nearing, Kenney	2 00
Braided Pillow Case or Sham:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Maud Hinsey, Pekin	2 00
Hemstitching:	
First premium. Mrs. L. E. Rockwell, Quincy	3 00
Second premium, E. W. Upham, Waukegan	2 00
Silk Embroidery:	
First premium, Maud Hinsey. Pekin	3 00
Second premium, Maud Hinsey, Pekin	2 00
Worsted Embroidery:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mary E. Duncan, Chicago	2 00
Cotton Embroidery:	
First premium, Mrs. J. Nearing, Kenney	3 00
Second premium, Celia Keene, Atlanta	2 00
Linen Embroidery:	
First premium, Mrs. J. Nearing, Kenney	3 00
Second premium, Anna Miller, Quincy	2 00
Embroidered Handkerchief:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. J. Nearing, Kenney	2 00
Ribbon Embroidery:	
First premium, Mrs. R. S. Payne, Chicago	2 00
Second premium, Maud Hinsey, Pekin	1 00

Embroidered Fire Screen:	
First premium, Maud Hinsey, Pekin	$3 00
Gold Embroidery:	
First premium, Mrs. J. Lange, Chicago	3 00
Second premium, Mrs. James Nowlan, Toulon	2 00
Embroidered Infant's Shawl:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Second premium, Mrs. Laura Towbridge, Chicago	1 00
Kensington Embroidery—Silk:	
First premium, Maud Hinsey, Pekin	4 00
Second premium, Mrs. J. G. Hill, DesMoines, Ia	2 00
Kensington Embroidery—Worsted:	
First premium, Mrs. J. G. Hill, DesMoines, Ia	4 00
Second premium, Mrs. E. D. Ransom, Belvidere	2 00
Chair Cover—back and seat:	
First premium, Ella Wells, Lebanon, Ind	8 00
Second premium, Anna Miller, Quincy	4 00
Cover for Ottoman or Foot-rest:	
First premium, Mrs. L. E. Rockwell, Quincy	5 00
Second premium, Maud Hinsey, Pekin	3 00
Sofa Pillow—Silk:	
First premium, Mrs. L. E. Rockwell, Quincy	5 00
Second premium, Mrs. L. E. Rockwell, Quincy	3 00
Sofa Pillow—Worsted:	
First premium, Miss L. F. Eastman, Chicago	5 00
Second premium, Maud Hinsey, Pekin	3 00
Carriage Afghan:	
First premium, Anna Miller, Quincy	8 00
Second premium, Anna Miller, Quincy	4 00
Infant's Afghan:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	4 00
Second premium, Mrs. P. S. Neal, Quincy	2 00
Infant's Robe:	
First premium, Mrs. Justine Loomis, Engelwood	4 00
Second premium, Ella Wells, Lebanon, Ind	2 00
Toilet Set—Embroidered:	
First premium, Mrs. J. Lange, Chicago	5 00
Second premium, Anna Miller, Quincy	3 00
Toilet Mats—on Canvass:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Toilet Cushion—Embroidered:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mrs. R. J. Woodruff, Chicago	2 00
Infant's Skirt—Embroidered:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mrs. Justine Loomis, Engelwood	2 00
Worsted Tapestry Work:	
First premium, Mrs. E. W. Upham, Waukegan	5 00
Japanese Tidy:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mrs. L. E. Rockwell, Quincy	2 00
Embroidered Silk Tidy:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. L. E. Rockwell, Quincy	2 00
Worsted Tapestry Picture:	
First premium, Mrs. Emily M. Boyden, Chicago	6 00
Second premium, Anna Miller, Quincy	3 00
Silk Tapestry Picture:	
First premium, Mrs. Emily M. Boyden, Chicago	6 00
Second premium, Mrs. Emily M. Boyden, Chicago	3 00
Specimen Guipure Lace:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mrs. Laura Trowbridge, Chicago	2 00

Embroidered Pillow Case or Sham:	
First premium, Maud Hinsey, Pekin	$3 00
Second premium, Celia Keene, Atlanta	2 00
Chenille Embroidery:	
First premium, Mrs. L. E. Rockwell, Quincy	5 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Lambrequin for Window:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Anna Miller, Quincy	2 00
Lambrequin for Mantle:	
First premium, Ella Wells, Lebanon, Ind	3 00
Second premium, Mrs. J. G. Hill, DesMoines, Ia	2 00
Lambrequin for Bracket:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Maud Hinsey, Pekin	2 00
Embroidered Piano Cover:	
First premium, Mrs. E. W. Upham, Waukegan	4 00
Second premium, Mrs. Laura Trowbridge, Chicago	3 00
Embroidered Table Cover:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	4 00
Second premium, Mrs. Jennie Taggart, Decatur	3 00
Table Scarf:	
First premium, Miss L. F. Eastman, Chicago	3 00
Second premium, Ella Wells, Lebanon, Ind	2 00
Lap Robe:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Anna Miller, Quincy	2 00
Specimen of Darned Net:	
First premium, Anna Miller, Quincy	3 00
Second premium, Ella Wells, Lebanon, Ind	2 00
Arrasene Embroidery—Silk:	
First premium, Mrs. A. L. Davis, Chicago	4 00
Second premium, Mrs. Mary A. Horn, Chicago	2 00
Arrasene Embroidery—Worsted:	
First premium, Mrs. J. G. Hill, DesMoines, Ia	4 00
Second premium, Miss L. F. Eastman, Chicago	2 00
Etching in Silk:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mrs. E. W. Upham, Waukegan	2 00
Etching in Cotton:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. Emily M. Boyden, Chicago	2 00
Plush Embroidery:	
First premium, Anna Miller, Quincy	5 00
Second premium, Mrs. J. Nearing, Kenney	3 00

Awarding Committee—Mrs. E. P, Sawyer, Waukegan; Jennie Squier, Virden; Mrs. Mrs. W. M. Farr.

Lot 116—Fancy Work.

Honiton Lace:	
First premium, Maud Hinsey, Pekin	$3 00
Second premium, Maud Hinsey, Pekin	2 00
Applique Lace:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mrs. W. H. Price, Gurne	2 00
Point Lace:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Maud Hinsey, Pekin	2 00
Lamp Mat:	
First premium, Maud Hinsey, Pekin	2 00
Second premium, Maud Hinsey, Pekin	1 00
Darning Bag:	
First premium, Maud Hinsey, Pekin	2 00
Second premium, Mrs. J. Nearing, Kenney	1 00

Slipper-case:	
First premium, Maud Hinsey, Pekin	$3 00
Second premium, Mrs. J. G. Hill, DesMoines, Ia	2 00
Card Receiver:	
First premium, Mrs. J. G. Hill, DesMoines, Ia	2 00
Second premium, Maud Hinsey, Pekin	1 00
Needle-case:	
First premium, Mrs. E. W. Upham, Waukegan	2 00
Second premium, Maud Hinsey, Pekin	1 00
Comb-case:	
First premium, Maud Hinsey, Pekin	2 00
Second premium, Mrs. J. G. Hill, Des Moines, Ia	2 00
Tidy in Wool:	
First premium, Mrs. L. E. Rockwell, Quincy	3 00
Second premium, Mrs. J. G. Hill, Des Moines, Ia	2 00
Tidy in Cotton:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. James Blanchard, Waukegan	2 00
Fancy Tidy, any material:	
First premium, Mrs. George McClintock, Chicago	3 00
Second premium, Mrs. James Nowlan, Toulon	2 00
Crochet Work in Worsted:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. J. Lange, Chicago	2 00
Crochet Work in Cotton:	
First premium, Celia Keene, Atlanta	3 00
Second premium, Ella Wells, Lebanon, Ind	2 00
Pair Silk Mittens—Knit:	
First premium, Mrs. P. D. Stagg, Greensburg, Ind	3 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	2 00
Toilet Cushion:	
First premium, L. F. Eastman, Chicago	2 00
Second premium, Maud Hinsey, Pekin	1 00
Work Basket:	
First premium, Maud Hinsey, Pekin	2 00
Second premium, Maud Hinsey, Pekin	1 00
Infant's Basket:	
First premium, Maud Hinsey, Pekin	2 00
Second premium, Mrs. Jennie Taggart, Decatur	1 00
Scrap Basket:	
First premium, Maud Hinsey, Pekin	2 00
Second premium, Mrs. J. G. Hill, DesMoines, Ia.	1 00
Wash-stand Set:	
First premium, Maud Hinsey, Pekin	3 00
Second premium, Mrs. J. Lange, Chicago	2 00
Whisk-broom Holder:	
First premium, Maud Hinsey, Pekin	2 00
Second premium, Mrs. Laura Trowbridge, Chicago	1 00
Display Fancy Work, by one person:	
First premium, Maud Hinsey, Pekin	25 00
Second premium, Mrs. J. Nearing, Kenney	15 00
Third premium, Mrs. P. D. Stagg, Greensburg, Ind	10 00

Awarding Committee—Mrs. J. L. Nichols, Chicago; Mrs. J. W. Barber, Albion; Marie Owen, Chicago.

LOT 117—MACHINE WORK.

Display of Sewing-Machine Work by a Sewing-Machine Company or its agent:	
Premium, Domestic Sewing Machine Co.	Diploma and $20 00
Display of Household Art Decorations by a Sewing Machine Company or its agent:	
Premium, Davis Sewing Machine Co.	Diploma and 15 00

Awarding Committee—Mrs. J. Ogden Bryant, Chicago; Mrs. J. Nearing, Kenney; Mrs. S. M. Fargo, Chicago.

LOT 118—DISPLAY OF LADIES' WORK.

Display of Fancy Needle and Ornamental Work (excepting Quilts) by one person;	
First premium, Maud Hinsey, Pekin	$35 00
Second premium, Mrs. P. D. Stagg, Greensburg, Ind	25 00
Third premium, Mrs. J. Nearing, Kenney	15 00
Fourth premium, Ella Wells, Lebanon, Ind	10 00

Awarding Committee—Mrs. B. D. Palmer, Chicago; Mrs. M. Conrad, Chicago; Effie C. Head, Hyde Park; Lizzie T. O'Briun, Chicago.

CLASS L—EDUCATION AND SCIENCE.

ALLAN C. RUSH, *Superintendent.*

LOT 119—GRADED SCHOOL EXHIBIT.

First Year Work:		
First premium, Oakland Public School	Diploma and	$5 00
Second premium, Braidwood School		3 00
Second Year Work:		
First premium, Oakland School	Diploma and	5 00
Second premium, Braidwood School		3 00
Third Year Work:		
First premium, Oakland School	Diploma and	5 00
Second premium, Douglas School, Springfield		3 00
Fourth Year Work:		
First premium, Lakeview School, No. 1	Diploma and	5 00
Second premium, Oakland School		3 00
Fifth Year Work:		
First premium, Oakland School	Diploma and	5 00
Second premium, Joliet School		3 00
Sixth Year Work:		
First premium, Braidwood School	Diploma and	5 00
Second premium, Braidwood School		3 00
Seventh Year Work:		
First premium, Braidwood School	Diploma and	5 00
Second premium, Oakland School		3 00
Eighth Year Work:		
First premium, Oakland School	Diploma and	5 00
Second premium, Lakeview School, No. 1		3 00

Awarding Committee—Geo. S. Baker, Evanston; W. H. Gardner, Rogers Park; Miss V. Sayre, Chicago.

LOT 120—SWEEPSTAKES—GRADED SCHOOL EXHIBIT.

School Work, 1st grade to 8th inclusive:		
First premium, Oakland School	Diploma and	$10 00
Second premium, Lakeview School No. 1		5 00
Third premium, Braidwood School		2 50
Penmanship—three papers:		
First premium, Oakland School	Diploma and	10 00
Second premium, Lakeview School No. 2		5 00
Third premium, Lakeview School No. 1		2 50
Five Pencil Drawings:		
First premium, Oak Park School	Diploma and	10 00
Second premium, Edwards School, Springfield		5 00
Third premium, Harlem School		2 50
Five Crayon Drawings:		
First premium, Forestville School	Diploma and	10 00
Map of States East of Mississippi River:		
First premium, Oakland School	Diploma and	10 00
Second premium, Lakeview School No. 2		5 00
Third premium, Austin School		3 00

Book-keeping—three papers:

First premium, Blue Island School	Diploma and	$10 00

Superintendent of Schools of town or city making best exhibit of work entered for premiums in Lot 119, and first two premiums in Lot 120:

Premium, Charles I. Parker, Superintendent Oakland Public School	Diploma.

Awarding Committee—Geo. S. Baker, Evanston; W. H. Gardner, Rogers Park; Miss W. Sayre, Chicago.

LOT 121—HIGH SCHOOL EXHIBIT.

LANGUAGES.

Three papers in Latin—first year work:

First premium, Lakeview High School	Diploma and	$5 00
Second premium, Moline High School		3 00

Three papers in Latin—Virgil's Æneid:

First premium, Lakeview High School	Diploma and	5 00
Second premium, Springfield High School		3 00

Three papers in Greek—first year work:

First premium, Lakeview High School	Diploma and	5 00
Second premium, Springfield High School		3 00

Three papers in German—Schiller's Maid of Orleans:

First premium, Lakeview High School	Diploma and	5 00
Second premium, Springfield High School		3 00

MATHEMATICS.

Three papers in Elementary Algebra:

First premium, Lanark High School	Diploma and	5 00
Second premium, Lakeview High School		3 00

Three papers in Plane Geometry:

First premium, Moline High School	Diploma and	5 00
Second premium, Springfield High School		3 00

SCIENCES.

Three papers in Physiology:

First premium, Evanston Tp. High School	Diploma and	$5 00
Second premium, Lanark High School		3 00

Three papers in Astronomy:

First premium, Danville High School	Diploma and	5 00
Second premium, Springfield High School		3 00

Three papers in Natural Philosophy:

First premium, Lakeview High School	Diploma and	5 00
Second premium, Lanark High School		3 00

MISCELLANEOUS.

Three papers in English Literature:

First premium, Lakeview High School	Diploma and	5 00
Second premium, Springfield High School		3 00

Three essays on miscellaneous subjects:

First premium, Springfield High School	Diploma and	5 00
Second premium, Lakeview High School		3 00

Three papers on Civil Government:

First premium, Evanston Township High School	Diploma and	5 00
Second premium, Springfield High School		3 00

Three papers on Book-keeping:

First premium, Evanston Township High School	Diploma and	5 00

Sweepstakes—papers on six of the foregoing subjects:

First premium, Lakeview High School	Diploma and	10 00
Second premium, Danville High School		5 00

Sweepstakes—papers on ten of the foregoing subjects:

Premium, Springfield High School	Diploma and	10 00

Awarding Committee—Geo. S. Baker, Evanston; W. H. Gardner, Rogers Park; Miss V. Sayre, Chicago.

Lot 122—Sweepstakes—High School Exhibit.

Five Pencil Drawings:		
First premium, Chicago High School	Diploma and	$10 00
Five Crayon Drawings:		
First premium, Chicago High School	Diploma and	10 00

Awarding Committee—Geo. S. Baker, Evanston; W. H. Gardner, Rogers Park; Miss V. Sayre, Chicago.

Lot 123—Country School Exhibit.

Spelling, older pupils:		
First premium, District 5, Lyons Tp., Cook county	Diploma and	$5 00
Second premium, District 9, Manlius Tp., LaSalle county		3 00
Spelling, younger pupils:		
First premium, District 1, Tp. 16, Range 3, Sangamon county	Diploma and	5 00
Second premium, District 1, Leyden Tp., Cook county		3 00
Business Forms, older pupils.		
First premium, District 1, Tp. 16, Range 7, Sangamon county	Diploma and	5 00
Second premium, District 3, Tp. 16, Range 7, Sangamon county		3 00
Letters, younger pupils:		
First premium, District 1, Tp. 16, Range 3, Sangamon county	Diploma and	5 00
Second premium, District 5, New Trier Tp., Cook county		3 00
Arithmetic, older pupils:		
First premium, District 1, Tp. 16, Range 3, Sangamon county	Diploma and	5 00
Second premium, District 7, Henderson School, Knox county		3 00
Arithmetic, younger pupils:		
First premium, District 1, Leyden Tp., Cook county	Diploma and	5 00
Second premium, District 8, Tp. 30 N., Range 1 W., Marshall county		3 00
Common Things, older pupils:		
First premium, District 4, Tp. 37, Range 14, Cook county	Diploma and	5 00
Second premium, District 4, Tp. 10, Range 5 W., Henderson county		3 00
Common Things, younger pupils:		
First premium, District 4, Tp. 2 S., Range 7 W., St. Clair county	Diploma and	5 00
Second premium, District 4, Tp. 37, Range 14, Cook county		3 00
Geography and History, older pupils:		
First premium, District 2, Tp. 34, Range 14, Will county	Diploma and	5 00
Second premium, District 5, Tp. 24, Range 8, Ogle county		3 00
Geography, younger pupils:		
First premium, District 8, Tp. 30 N., Range 8 W., Marshall county	Diploma and	5 00
Second premium, District 1, Tp. 16, Range 3, Sangamon county		3 00
Language, older pupils:		
First premium, District 5, Tp. 17, Range 4, Sangamon county	Diploma and	5 00
Second premium, District 5, Lyons Tp., Cook county		3 00
Language, younger pupils:		
First premium, District 5, New Trier Tp., Cook county	Diploma and	5 00
Second premium, District 2, Tp. 34, Range 14, Will county		3 00
Botany:		
First premium, District 3, Tp. 3 S., Range 6 W., St. Clair county	Diploma and	5 00
Second premium, District 1, Bloom Tp., Cook county		3 00
Physiology:		
First premium, District 1, Bloom Tp., Cook county	Diploma and	5 00
Second premium, District 2, Maine Tp., Cook county		3 00
Natural Philosophy:		
First premium, District 2, Maine Tp., Cook county	Diploma and	5 00
Second premium, District 4, Tp. 21, Range 4 E., Whiteside county		3 00
Zoölogy:		
First premium, District 3 S., Range 6 W., St. Clair county	Diploma and	5 00
Second premium, District 6, Lake Tp., Cook county		3 00

Awarding Committee—Geo. S. Baker, Evanston; W. H. Gardner, Rogers Park; Miss V. Sayre, Chicago.

Lot 124—Sweepstakes—Country School Exhibit.

Exhibit by one Country School:

First premium, District 2, Tp. 34, Range 14, Will county	Diploma and $10 00
Second premium, District 3, Tp. 25, Range 7, Ford county	5 00
Third premium, District 3, Tp. 16, Range 7, Sangamon county	3 00

Writing—three papers:

First premium, District 5, Tp. 17, Range 4, Sangamon county	Diploma and 10 00
Second premium, District 5, Lyons Tp., Cook county	5 00
Third premium, District 3, Tp. 16, Range 7, Sangamon county	3 00

Five Pencil Drawings:

First premium, District 5, Lake and Hyde Park Tps., Cook county	Diploma and 10 00

Five Crayon Drawings:

First premium, District 5, Lake and Hyde Park Tps., Cook county	Diploma and 10 00

Map of States East of the Mississippi:

First premium, District 5, Tp. 31, Range 5, LaSalle county	Diploma and 10 00
Second premium, Williamsville School, Sangamon county	5 00
Third premium, Williamsville School, Sangamon county	3 00

County Superintendent of Schools making best exhibit of work in Lot 123, and first two premiums in Lot 124:

Premium, County Superintendent, Cook county	Diploma

Awarding Committee—Geo. S. Baker, Evanston; W. H. Gardner, Rogers Park; Miss V. Sayre, Chicago.

Lot 125—Penmanship.

No premiums awarded in this Lot, but every facility afforded for exhibition.

Lot 126—Taxidermy, Mineralogy and Conchology.

Collection of Minerals and Fossils:

First premium, Effie C. Head, Chicago	$50 00
Second premium, J. M. Wiess, Chicago	20 00

Collection Illinois Birds and Mammals—50 species or more:

First premium, Wm. Braddock, Springfield	40 00
Second premium, J. M. Wiess, Chicago	20 00

Collection illustrating Conchology of Illinois—100 species or more:

First premium, H. S. Hackman, Peru	20 00

Display of Mound Relics:

Second premium, Jas. M. Head, Chicago	20 00

Awarding Committee—D. S. Heffron, Washington Heights; C. L. Peyton, Chicago; Chas. I. Parker, Chicago; R. A. Tuttle, Chicago.

Lot 127—Entomology, Etc.

Collection of Insects:

First premium, Wm. Braddock, Springfield	$30 00
Second premium, F. M. Bauder, New Milford	15 00

Collection representing Botany of Illinois:

First premium, C. L. Hockaday, Deerfield	20 00
Second premium, M. Carter, Oak Park	10 00

Awarding Committee—Geo. S. Baker, Evanston; Virginia Sayre, Chicago.

Lot 128—Musical Instruments.

No premiums awarded in this Lot, but every facility afforded for exhibition.

Lot 129—Printing, Engraving, Etc.

Shell Work:

Second premium, Mrs. J. F. Robinson, Atlanta	$1 00

Awarding Committee—H. Hanson, Chicago; J. M. Wiess, Chicago; Jas. Head, Chicago.

Lot 130—Architectural and Mechanical Drawings.

Drawing, plan and specification for Rural Residence, cost $1,000.00:
Premium, J. P. Bryant, Princeton ....Diploma and $15 00

Drawing, plan and specification for Rural Residence, cost $2,500.00:
Premium, J. P. Bryant, Princeton ....Diploma and 15 00

Drawing, plan and specification for Farm Barn, cost $1,000.00:
Premium, J. P. Bryant, Princeton ....Diploma and 10 00

Drawing, plan and specification for Farm Barn, cost $2,500.00:
Premium, Jas. A. Cunningham, Virginia ....Diploma and 15 00

Awarding Committee—S. H. Peabody, Champaign; John T. Walton, Bloomington.

CLASS M—SPEED.

E. C. LEWIS, *Superintendent.*

(See Class B, Lot 44.)

CLASS N—AGRICULTURAL IMPLEMENTS.

PETER SCHUTTLER, *Superintendent.*
M. CONRAD, *Acting Superintendent.*

No premiums awarded in this Class, but every facility afforded for exhibition.

Reports from County Agricultural Boards.

The financial reports of the County Agricultural Boards, and other societies in this State holding Fairs in 1884, are presented herewith.

The reports of the exhibitions in the various departments, and other matters usually published in connection with the reports, are tabulated and follow the financial exhibits.

ADAMS COUNTY—Camp Point.

Officers.—President, E. A. Rogers, Quincy; Secretary, Fred. Boger, Camp Point; Treasurer, D. L. Hair, Columbus.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1,443 61
" received in 1884, fees (gate and entrance)		4,585 80
" booth rents and permits		892 10
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		438 50
" paid 1884, in premiums	$3,546 50	
" paid 1884, for real estate, buildings and improvements	509 37	
" paid 1884, for current expenses other than premiums	1,738 36	
" paid 1884, on previous indebtedness		
" remaining in the treasury	1,665 78	
" deficit the current year		
Totals	$7,460 01	$7,460 01

BOONE COUNTY.

Officers.—President, George Reed, Belvidere; Secretary, A. E. Jenner, Belvidere; Treasurer, G. F. Winne, Belvidere.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$7 61
" received in 1884, fees (gate and entrance)		2,015 00
" booth rents and permits		152 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$1,061 00	
" paid 1884, for real estate, building and improvements	51 12	
" paid 1884, for current expenses other than premiums	923 62	
" paid 1884, on previous indebtedness		
" remaining in the treasury	238 87	
" deficit the current year		
Total	$2,274 61	$2,274 61

BROWN COUNTY.

OFFICERS.—President, C. M. Dunlap, Mt. Sterling; Secretary, J. J. McDannold, Mt. Sterling; Treasurer, I. D. Nokes, Mound Station.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1,650 12
" received in 1884, fees (gate and entrance)		3,448 41
" booth rents and permits		461 60
" received 1884, sale shares stock		362 56
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$2,217 50	
" paid 1884, for real estate, buildings and improvements	1,307 66	
" paid 1884, for current expenses other than premiums	1,254 90	
" paid 1884, on previous indebtedness	1,210 00	
" remaining in the treasury	32 63	
" deficit the current year		
Totals	$6,022 69	$6,022 69

BUREAU COUNTY.

OFFICERS.—President, John Crassman, La Moille; Secretary, M. C. Clark, Princeton; Treasurer, C. G. Cushing, Princeton.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$138 16
" received in 1884, fees (gate and entrance)		4,768 03
" booth rents and permits		414 30
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		604 84
" paid 1884, in premiums	$3,259 25	
" paid 1884, for real estate, buildings and improvements	916 45	
" paid 1884, for current expenses other than premiums	1,605 56	
" paid 1884, on previous indebtedness	239 80	
" remaining in the treasury	4 27	
" deficit the current year		
Totals	$6,025 33	$6,025 33

CASS COUNTY.

OFFICERS.—President, R. W. Rayburn, Virginia; Secretary, R. Lancaster, Virginia; Treasurer, C. W. Savage, Virginia.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$147 16
" received in 1884, fees (gate and entrance)		1,810 40
" booth rents and permits		164 90
" received 1884, sale shares stock		
" received 1884, State appropriation		
" received 1884, other sources		
" paid 1884, in premiums	$1,433 20	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	686 05	
" paid 1884, on previous indebtedness		
" remaining in the treasury	3 21	
" deficit the current year		
Totals	$2,122 46	$2,122 46

CHAMPAIGN COUNTY.

Officers.—President, H. H. Harris, Champaign; Secretary, H. J. Dunlap, Champaign; Treasurer, G. F. Beardsley, Champaign.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$165 06
" received in 1884, fees (gate and entrance)		3,225 75
" booth rents and permits		524 25
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		269 45
" paid 1884, in premiums	$2,495 00	
" paid 1884, for real estate, buildings and improvements	421 44	
" paid 1884, for current expenses other than premiums	876 06	
" paid 1884, on previous indebtedness	400 00	
" remaining in the treasury	92 01	
" deficit the current year		
Totals	$4,284 51	$4,284 51

CLAY COUNTY.

Officers.—President, S. Rider, Flora; Secretary, I. H. Smith, Flora; Treasurer, Dora Rider.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$12 86
" received in 1884, fees (gate and entrance)		1,100 00
" booth rents and permits		100 00
" received 1884, sale shares stock		
" received 1884, State appropriation		
" received 1884, other sources		100 00
" paid 1884, in premiums	$1,000 00	
" paid 1884, for real estate, buildings and improvements	25 00	
" paid 1884, for current expenses other than premiums	287 86	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit the current year		
Totals	$1,312 86	$1,312 86

COLES COUNTY.

Officers.—President, Wm. Millar, Mattoon; Secretary, W. E. Hampton, Charleston; Treasurer, W. B. Galbreath, Charleston.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$54 77
" received in 1884, fees (gate and entrance)		3,483 95
" booth rents and permits		535 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		1,290 79
" paid 1884, in premiums	$2,486 25	
" paid 1884, for real estate, buildings and improvements	1,630 58	
" paid 1884, for current expenses other than premiums	801 12	
" paid 1884, on previous indebtedness	946 00	
" remaining in the treasury	50 56	
" deficit the current year		450 00
Totals	$5,914 51	$5,914 51

CRAWFORD COUNTY—ROBINSON.

OFFICERS.—President, P. P. Connett, Robinson; Secretary, S. R. Delzell, Robinson; Treasurer, Wm. Parker, Robinson.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$1,111 90
" booth rents and permits		181 48
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$794 85	
" paid 1884, for real estate, buildings and improvements	253 84	
" paid 1884, for current expenses other than premiums	380 86	
" paid 1884, on previous indebtedness		
" remaining in treasury		
" deficit the current year		36 17
Totals	$1,429 55	$1,429 55

CUMBERLAND COUNTY—TOLEDO.

OFFICERS.—President, C. G. Jones, Greenup; Secretary, W. L. Brewster, Toledo; Treasurer, W. S. Everhart, Toledo.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$2,037 35
" booth rents and permits		104 00
" received 1884, sale shares stock		80 00
" received 1884, State appropriation		100 00
" received 1884, other sources		1,318 92
" paid 1884, in premiums	$1,738 90	
" paid 1884, for real estate, buildings and improvements	1,068 73	
" paid 1884, for current expenses other than premiums	593 60	
" paid 1884, on previous indebtedness	182 69	
" remaining in the treasury	56 35	
" deficit the current year		
Totals	$3,640 27	$3,640 27

DEKALB COUNTY.

OFFICERS.—President, Hiram Holcomb, Sycamore; Secretary, B. F. Wyman, Sycamore; Treasurer, A. W. Townsend, Sycamore.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$21 20
" received in 1884, fees (gate and entrance)		1,708 80
" booth rents and permits		250 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		65 00
" paid 1884, in premiums	$819 50	
" paid 1884, for real estate, buildings and improvements	275 00	
" paid 1884, for current expenses other than premiums	780 50	
" paid 1884, on previous indebtedness		
" remaining in treasury	270 00	
" deficit the current year		
Totals	$2,145 00	$2,145 00

DEWITT COUNTY—CLINTON.

OFFICERS.—President, Z. D. Cantrall, Waynesville; Secretary, W. B. Russell, Clinton; Treasurer, M. R. Colwell, Clinton.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report	....	$10 08
" received in 1884, fees (gate and entrance)	....	1,671 55
" booth rents and permits	....	882 90
" received 1884, sale shares stock	....	75 00
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	....
" paid 1884, in premiums	$1,457 50	....
" paid 1884, for real estate, buildings and improvements	200 00	....
" paid 1884, for current expenses other than premiums	1,044 07	....
" paid 1884, on previous indebtedness	....	....
" remaining in the treasury	37 96	....
" deficit the current year	....	....
Totals	$2,739 53	$2,739 53

DEWITT COUNTY—FARMER CITY.

OFFICERS.—President, V. S. Lindsey, Farmer City; Secretary, W. W. Alder, Farmer City; Treasurer, A. T. Kincaid, Farmer City.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report	....	....
" received in 1884, fees (gate and entrance)	....	$3,095 50
" booth rents and permits	....	429 25
" received 1884, sale shares stock	....	230 00
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	588 00
" paid 1884, in premiums	$2,200 90	....
" paid 1884, for real estate, buildings and improvements	366 60	....
" paid 1884, in dividends to stockholders	699 00	....
" paid 1884, for current expenses other than premiums	747 30	....
" paid 1884, on previous indebtedness	164 53	....
" remaining in the treasury	264 42	....
" deficit the current year	....	....
Totals	$4,442 75	$4,442 75

DUPAGE COUNTY.

OFFICERS.—President, O. J. Wright, Naperville; Secretary, Geo. W. Brown, Wheaton; Treasurer, T. M. Hull, Wheaton.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report	....	$21 18
" received in 1884, fees (gate and entrance)	....	319 00
" booth rents and permits	....	27 00
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	273 54
" paid 1884, in premiums	$453 25	
" paid 1884, for real estate, buildings and improvements	50 37	....
" paid 1884, for current expenses other than premiums	73 28	....
" paid 1884, on previous indebtedness	126 66	....
" remaining in the treasury	37 16	....
" deficit the current year	....	....
Totals	$740 72	$740 72

EDGAR COUNTY.

OFFICERS.—President, W. O. Wilson, Paris; Secretary, H. B. Adams, Paris; Treasurer, Leroy Wiley, Paris.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1,500 00
" received in 1884, fees (gate and entrance)		3,259 95
" booth rents and permits		559 18
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		596 91
" paid 1884, in premiums	$3,029 25	
" paid 1884, for real estate, buildings and improvements	1,612 22	
" paid 1884, for current expenses other than premiums		
" paid 1884, on previous indebtedness		
" remaining in the treasury	1,374 57	
" deficit the current year		
Totals	$6,016 04	$6,016 04

EDWARDS COUNTY.

OFFICERS.—President, John Curtis, Albion; Secretary, L. L. Emerson, Albion; Treasurer, George Weaver, Albion.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$424 50
" received in 1884, fees (gate and entrance)		1,737 25
" booth rents and permits		250 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$1,616 40	
" paid 1884, for real estate, buildings and improvements	131 40	
" paid 1884, for current expenses other than premiums	290 02	
" paid 1884, on previous indebtedness		
" remaining in the treasury	473 93	
" deficit the current year		
Totals	$2,511 75	$2,511 75

EFFINGHAM COUNTY.

OFFICERS.—President, William Donaldson, Mason; Secretary, C. A. Van Allen, Effingham; Treasurer, A. W. Le Crom, Effingham.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$381 80
" booth rents and permits		73 95
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		634 96
" paid 1884, in premiums	$800 50	
" paid 1884, for real estate, buildings and improvements	98 64	
" paid 1884, for current expenses other than premiums	137 79	
" paid 1884, on previous indebtedness	253 78	
" remaining in the treasury		
" deficit the current year		100 00
Totals	$1,290 71	$1,290 71

FAYETTE COUNTY—VANDALIA.

OFFICERS.—President, O. E. Lovett, St. Elmo; Secretary, C. L. Dinges, Jr., Vandalia; Treasurer, Simeon Perkins, Vandalia.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$62 98
“ received in 1884, fees (gate and entrance)		500 55
“ booth rents and permits		121 77
“ received 1884, sale shares stock		
“ received 1884, State appropriation		100 00
“ received 1884, other sources		
“ paid 1884, in premiums	$183 26	
“ paid 1884, for real estate, buildings and improvements		
“ paid 1884, for current expenses other than premiums	641 79	
“ paid 1884, on previous indebtedness		
“ remaining in the treasury	23 93	
“ deficit the current year		63 68
Totals	$848 98	$848 98

FRANKLIN COUNTY.

OFFICERS.—President, W. R. Webb, Benton; Secretary, W. F. Spiller, Benton; Treasurer, A. D. Jackson, Benton.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$163 93
“ received in 1884, fees (gate and entrance)		2,070 55
“ booth rents and permits		379 45
“ received 1884, sale shares stock		
“ received 1884, State appropriation		100 00
“ received 1884, other sources		130 00
“ paid 1884, in premiums	$1,580 00	
“ paid 1884, for real estate, buildings and improvements	2,680 00	
“ paid 1884, for current expenses other than premiums	633 50	
“ paid 1884, on previous indebtedness		
“ remaining in the treasury		
“ deficit the current year		2,049 57
Totals	$4,893 50	$4,893 50

FULTON COUNTY.

OFFICERS.—President, John Prickett, Lewistown; Secretary, J. R. Gardiner, Canton; Treasurer, J. M. Stewart, Lewistown.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
“ received in 1884, fees (gate and entrance)		$2,079 60
“ booth rents and permits		251 00
“ received 1884, sale shares stock		
“ received 1884, State appropriation		
“ received 1884, other sources		900 00
“ paid 1884, in premiums	$1,772 00	
“ paid 1884, for real estate, buildings and improvements	521 00	
“ paid 1884, for current expenses other than premiums	691 34	
“ paid 1884, on previous indebtedness	121 50	
“ remaining in treasury (including amount in defunct bank)	124 76	
“ deficit the current year		
Totals	$3,230 60	$3,230 60

FULTON COUNTY—Avon.

Officers.—President, D. H. Gorham, Avon; Secretary, S. L. Tompkins, Avon; F. M. Nance, Avon.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$1,886 60
" booth rents and permits		351 50
" received 1884, sale shares stock		7 00
" received 1884, State appropriation		100 00
" received 1884, other sources		363 10
" paid 1884, in premiums	$1,275 69	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	1,114 67	
" paid 1884, on previous indebtedness	12 79	
" remaining in the treasury	305 05	
" deficit the current year		
Totals	$2,708 20	$2,708 20

GALLATIN COUNTY.

Officers.—President, M. M. Pool, Shawneetown; Secretary, John L Robinson, Shawneetown; Treasurer, Jno. D. Richeson, Shawneetown.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$2,680 85
" booth rents and permits		521 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$2,633 25	
" paid 1884, for real estate, buildings and improvements	1,511 30	
" paid 1884, for current expenses other than premiums	593 10	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit the current year		1,435 80
Totals	$4,737 65	$4,737 65

GREENE COUNTY.

Officers.—President, E. V. Baldwin, White Hall; Secretary, N. J. Andrews, Carrollton; Treasurer, L. S. Eldred, Carrollton.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$2,689 00
" booth rents and permits		316 50
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		661 80
" paid 1884, in premiums	$2,341 50	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	2,010 06	
" paid 1884, on previous indebtedness	44 60	
" remaining in the treasury		
" deficit the current year		628 86
Totals	$4,396 16	$4,396 16

HAMILTON COUNTY.

OFFICERS.—President, John H. Wilson, McLeansboro; Secretary, T. B. Stelle, McLeansboro; Treasurer, John J. Buck, McLeansboro.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$368 70
‘‘ received in 1884, fees (gate and entrance)		1,677 35
‘‘ booth rents and permits		1,218 00
‘‘ received 1884, sale shares stock		
‘‘ received 1884, State appropriation		
‘‘ received 1884, other sources		50 00
‘‘ paid 1884, in premiums	$1,514 25	
‘‘ paid 1884, for real estate, buildings and improvements	500 00	
‘‘ paid 1884, for current expenses other than premiums	697 50	
‘‘ paid 1884, on previous indebtedness		
‘‘ remaining in the treasury	602 30	
‘‘ deficit the current year		
Totals	$3,314 05	$3,314 05

HANCOCK COUNTY—CARTHAGE.

OFFICERS.—President, Eli W. Bennett, Chili; Secretary, O. F. Berry, Carthage; Treasurer, E. M. Robbins, Carthage.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1,221 60
‘‘ received in 1884, fees (gate and entrance)		5,650 75
‘‘ booth rents and permits		618 15
‘‘ received 1884, sale shares stock		115 00
‘‘ received 1884, State appropriation		100 00
‘‘ received 1884, other sources		808 45
‘‘ paid 1884, in premiums	$3,431 80	
‘‘ paid 1884, for real estate, buildings and improvements	2,911 17	
‘‘ paid 1884, for current expenses other than premiums	1,729 07	
‘‘ paid 1884, on previous indebtedness		
‘‘ remaining in the treasury	441 91	
‘‘ deficit the current year		
Totals	$8,513 95	$8,513 95

HARDIN COUNTY.

OFFICERS.—President, J. B. Miller, Elizabethtown; Secretary, L. F. Twitchell, Elizabethtown; Treasurer, Thos. A. McAmis, Elizabethtown.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$105 55
‘‘ received in 1884, fees (gate and entrance)		830 15
‘‘ booth rents and permits		174 85
‘‘ received 1884, sale shares stock		
‘‘ received 1884, State appropriation		100 00
‘‘ received 1884, other sources		
‘‘ paid 1884, in premiums	$795 00	
‘‘ paid 1884, for real estate, buildings and improvements	496 65	
‘‘ paid 1884, for current expenses other than premiums	313 90	
‘‘ paid 1884, on previous indebtedness		
‘‘ remaining in the treasury		
‘‘ deficit the current year		395 00
Totals	$1,605 55	$1,605 55

HENDERSON COUNTY.

OFFICERS.—President, Thos. G. Richey, Olena; Secretary, R. A. McKinley, Biggsville; Treasurer, Geo. M. Dill, Biggsville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1,262 50
" received in 1884, fees (gate and entrance)		275 65
" booth rents and permits		
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		412 75
" paid 1884, in premiums	$1,678 00	
" paid 1884, for real estate, buildings and improvements	264 94	
" paid 1884, for current expenses other than premiums	302 46	
" paid 1884, on previous indebtedness	107 77	
" remaining in the treasury		
" deficit the current year		302 27
Totals	$2,353 17	$2,353 17

HENRY COUNTY.

OFFICERS.—President, N. C. Gilbert, Geneseo; Secretary, R. H. Hinman, Cambridge; Treasurer, W. H. Shephard, Cambridge.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$281 77
" received in 1884, fees (gate and entrance)		2,621 02
" booth rents and permits		480 69
" received 1884, sale shares stock		25 00
" received 1884, State appropriation		100 00
" received 1884, other sources		216 40
" paid 1884, in premiums	$2,718 75	
" paid 1884, for real estate, buildings and improvements	300 00	
" paid 1884, for current expenses other than premiums	541 43	
" paid 1884, on previous indebtedness	139 25	
" remaining in the treasury	25 45	
" deficit the current year		
Totals	$3,724 88	$3,724 88

JACKSON COUNTY.

OFFICERS.—President, J. B. Mayham, Murphysboro; Secretary, Geo. Kennedy, Jr., Murphysboro; Treasurer, R. W. Watson, Murphysboro.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$862 30
" booth rents and permits		210 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		97 00
" paid 1884, in premiums	$1,151 75	
" paid 1884, for real estate, buildings and improvements	176 20	
" paid 1884, for current expenses other than premiums	247 70	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit the current year		306 35
Totals	$1,575 65	$1,575 65

JACKSON COUNTY—Carbondale.

Officers.—President, John M. Scurlock, Carbondale; Secretary, Sam T. Brush, Carbondale; Treasurer, C. C. Campbell, Carbondale.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$409 86
" received in 1884, fees (gate and entrance)		2,579 84
" booth rents and permits		278 95
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		352 65
" paid 1884, in premiums	$2,373 75	
" paid 1884, for real estate, buildings and improvements	504 81	
" paid 1884, for current expenses other than premiums	819 21	
" paid 1884, on previous indebtedness		
" remaining in the treasury	23 53	
" deficit the current year		
Totals	$3,721 30	$3,721 30

JASPER COUNTY.

Officers.—President, John Mason, Wheeler; Secretary, W. E. Barrett, Newton; Treasurer, J. H. Arnold, Newton.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$326 64
" received in 1884, fees (gate and entrance)		1,728 05
" booth rents and permits		180 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		55 00
" paid 1884, in premiums	$923 45	
" paid 1884, for real estate, buildings and improvements	106 59	
" paid 1884, for current expenses other than premiums	394 00	
" paid 1884, on previous indebtedness		
" remaining in the treasury	965 65	
" deficit the current year		
Totals	$2,389 69	$2,389 69

JEFFERSON COUNTY.

Officers.—President, Jesse A. Dees, Laur; Secretary, John S. Bogan, Mt. Vernon; Treasurer, Geo. W. Evans, Mt. Vernon.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received 1884, fees (gate and entrance)		$2,486 80
" booth rents and permits		666 25
" received 1884, sale shares stock		
" received 1884, State appropriation		
" received 1884, other sources		
" paid 1884, in premiums	$2,163 35	
" paid 1884, for real estate, buildings and improvements	456 60	
" paid 1884, for current expenses other than premiums	478 99	
" paid 1884, on previous indebtedness	280 80	
" remaining in the treasury		
" deficit the current year		226 69
Totals	$3,379 74	$3,379 74

JERSEY COUNTY.

Officers.—President, David E. Beaty, Jerseyville; Secretary, Morris R. Locke, Jerseyville; Treasurer, John A. Shepherd, Jerseyville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$4,558 05
" booth rents and permits		754 50
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		1,184 90
" paid 1884, in premiums	$3,579 00	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	2,633 66	
" paid 1884, on previous indebtedness	384 79	
" remaining in the treasury		
" deficit the current year		
Totals	$6,597 45	$6,597 45

JO DAVIESS COUNTY—Galena.

Officers.—President, George S. Avery, Galena; Secretary, Frank Bostwick, Galena; Treasurer, R. S. Norris, Galena.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$1,876 66
" booth rents and permits		525 50
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		301 85
" paid 1884, in premiums	$1,323 55	
" paid 1884, for real estate, buildings and improvements	189 14	
" paid 1884, for current expenses other than premiums	934 27	
" paid 1884, on previous indebtedness		
" remaining in the treasury	357 05	
" deficit the current year		
Totals	$2,804 01	$2,804 01

JO DAVIESS COUNTY—Warren.

Officers.—President, Robert Hawley, Warren; Secretary, Joseph Hicks, Warren; Treasurer, James Bayne, Warren.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$15 38
" received in 1884, fees (gate and entrance)		966 40
" booth rents and permits		418 30
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		19 24
" paid 1884, premiums	$949 22	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	327 52	
" paid 1884, on previous indebtedness		
" remaining in the treasury	242 58	
" deficit the current year		
Totals	$1,519 32	$1,519 32

KANKAKEE COUNTY.—Kankakee.

Officers.—President, Milo Barnard, Manteno; Secretary, M. Enyart, Kankakee; Treasurer, W. W. Todd, Kankakee.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$57 65
" received in 1884, fees (gate and entrance)		2,081 57
" booth rents and permits		335 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		88 00
" paid 1884, in premiums	$1,571 10	
" paid 1884, for real estate, buildings and improvements	531 26	
" paid 1884, for current expenses other than premiums	478 07	
" paid 1884, on previous indebtedness	6 00	
" remaining in the treasury	75 79	
" deficit the current year		
Totals	$2,662 22	$2,662 22

KENDALL COUNTY.

Officers.—President, Nathan Loucks, Oswego; Secretary, Chas. T. Hobbs, Yorkville; Treasurer, W. R. Newton, Yorkville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$1,960 27
" booth rents and permits		135 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$903 40	
" paid 1884, for real estate, buildings and improvements	105 00	
" paid 1884, for current expenses other than premiums	881 62	
" paid 1884, on previous indebtedness		
" remaining in the treasury	305 25	
" deficit the current year		
Totals	$2,195 27	$2,195 27

KNOX COUNTY.

Officers.—President, D. M. Eiker, Knoxville; Secretary, O. L. Campbell, Knoxville; Treasurer, I. B. Gault, Knoxville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$2,300 00
" booth rents and permits		350 00
" received 1884, sale shares stock		244 00
" received 1884, State appropriation		100 00
" received 1884, other sources		120 00
" paid 1884, in premiums	$2,500 00	
" paid 1884, for real estate, buildings and improvements	100 00	
" paid 1884, for current expenses other than premiums	242 57	
" paid 1884, on previous indebtedness	164 00	
" remaining in the treasury	107 43	
" deficit the current year		
Totals	$3,114 00	$3,114 00

LAKE COUNTY—WAUKEGAN.

OFFICERS.—President, O. O. Lincoln, Waukegan; Secretary, H. E. Partridge, Waukegan; Treasurer, W. H. Ellis, Waukegan.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$2,309 85
" booth rents and permits		684 93
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		749 93
" paid 1884, in premiums	$1,773 75	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	1,448 09	
" paid 1884, on previous indebtedness	416 40	
" remaining in the treasury	206 47	
" deficit the current year		
Totals	$3,844 71	$3,844 71

LAKE COUNTY—LIBERTYVILLE.

OFFICERS.—President, E. W. Parkhurst, Libertyville; Secretary, W. T. Biggs, Libertyville; Treasurer, Isaac Hearth, Libertyville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$24 21
" received in 1884, fees, (gate and entrance)		1,052 20
" booth rents and permits		427 75
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		67 83
" paid 1884, in premiums	$997 60	
" paid 1884, for real estate, buildings and improvements	285 39	
" paid 1884, for current expenses other than premiums	372 42	
" paid 1884, on previous indebtedness	189 25	
" remaining in the treasury		
" deficit the current year		172 67
Totals	$1,844 66	$1,844 66

LASALLE COUNTY.

OFFICERS.—President, Wm. Truman, Mendota; Secretary, Chas. T. Madden, Mendota; Treasurer, John Goedtner, Mendota.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$218 98
" received in 1880, fees (gate and entrance)		5,170 35
" booth rents and permits		362 75
" received 1884, sale shares stock		7 00
" received 1884, State appropriation		100 00
" received 1884, other sources		224 75
" paid 1884, in premiums	$2,354 25	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	2,419 82	
" paid 1884, on previous indebtedness	534 89	
" remaining in the treasury	774 87	
" deficit the current year		
Totals	$6,083 83	$6,083 83

LIVINGSTON COUNTY.

OFFICERS.—President, R. C. Straight, Fairbury; Secretary, Thos. S. O. McDowell, Fairbury; Treasurer, L. B. Dominy, Fairbury.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$36 72
" received in 1884, fees (gate and entrance)		2,884 46
" booth rents and permits		310 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		606 35
" paid 1884, in premiums	$2,647 00	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	933 66	
" paid 1884, on previous indebtedness		
" remaining in the treasury	356 87	
" deficit the current year		
Totals	$3,937 53	$3,937 53

LOGAN COUNTY—LINCOLN.

OFFICERS.—President, A. B. Nicholson, Lincoln; Secretary, F. H. Stokes, Lincoln; Treasurer, B. P. Andrews, Lincoln.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$3,609 92
" booth rents and permits		768 00
" received 1884, sale shares stock		7,150 00
" received 1884, State appropriation		100 00
" received 1884, other sources		851 30
" paid 1884, in premiums	$3,936 75	
" paid 1884, for real estate, buildings and improvements	737 68	
" paid 1884, for current expenses other than premiums	1,450 43	
" paid 1884, on previous indebtedness	8,990 92	
" remaining in the treasury		
" deficit the current year		2,636 56
Totals	$15,115 78	$15,115 78

LOGAN COUNTY—ATLANTA.

OFFICERS.—President, Ed. Stubblefield, McLean; Secretary, J. P. Hieronymus, Atlanta; Treasurer, C. H. Turner, Atlanta.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$840 30
" received in 1884, fees (gate and entrance)		2,660 00
" booth rents and permits		392 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		550 25
" paid 1884, in premiums	$1,517 50	
" paid 1884, for real estate, buildings and improvements	676 16	
" paid 1884, for current expenses other than premiums	984 31	
" paid 1884, on previous indebtedness		
" remaining in the treasury	1,364 58	
" deficit the current year		
Totals	$4,542 55	$4,542 55

MACOUPIN COUNTY.

OFFICERS.—President, Joseph Bird, Carlinville; Secretary, Geo. J. Castle, Carlinville; Treasurer, Robert Bacon, Carlinville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$10 00
" received in 1884, fees (gate and entrance)		1,730 00
" booth rents and permits		542 50
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		107 00
" paid 1884, in premiums	$2,181 50	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	838 00	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit the current year		530 00
Totals	$3,019 50	$3,019 50

MARION COUNTY.

OFFICERS.—President, A. Coffin, Alena; Secretary, A. J. Harvey, Salem; Treasurer, H. R. Hall, Salem.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$11 84
" received in 1884, fees (gate and entrance)		1,432 65
" booth rents and permits		232 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		41 50
" paid 1884, in premiums	$1,490 50	
" paid 1884, for real estate, buildings and improvements	432 00	
" paid 1884, for current expenses other than premiums	132 00	
" paid 1884, on previous indebtedness	196 59	
" remaining in the treasury		
" deficit the current year		433 10
Totals	$2,251 09	$2,251 09

MARSHALL COUNTY.

OFFICERS.—President, S. S. Burgess, Tonica; Secretary, G. S. McAdam, Wenona; Joseph A. Blair, Wenona.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$94 02
" received in 1884, fees (gate and entrance)		4,936 37
" booth rents and permits		
" received 1884, sale shares stock		186 53
" received 1884, State appropriation		100 00
" received 1884, other sources		269 75
" paid 1884, in premiums	$3,356 25	
" paid 1884, for real estate, buildings and improvements	80 00	
" paid 1884, for current expenses other than premiums	1,934 94	
" paid 1884, on previous indebtedness	273 50	
" remaining in the treasury		
" deficit the current year		58 02
Totals	$5,644 69	$5,644 69

MASON COUNTY.

OFFICERS.—President, J. F. Kelsey, Havana; Secretary, S. A. Murdock, Havana; Treasurer, Henry Borget, Jr., Havana.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$800 00
" booth rents and permits		125 00
" received 1884, sale shares stock		
" received 1884, State appropriation		
" received 1884, other sources		169 80
" paid 1884, in premiums	$474 00	
" paid 1884, for real estate, buildings and improvements	591 27	
" paid 1884, for current expenses other than premiums		
" paid 1884, on previous indebtedness		
" remaining in the treasury	29 53	
" deficit the current year		
Totals	$1,094 80	$1,094 80

McHENRY COUNTY—WOODSTOCK.

OFFICERS.—President, Thos. McD. Richards, Woodstock; Secretary, A. S. Wright, Woodstock; Treasurer, A. E. Bourne, Woodstock.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$6 16
" received in 1884, fees (gate and entrance)		3,398 50
" booth rents and permits		614 75
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		828 75
" paid 1884, in premiums	$1,614 75	
" paid 1884, for real estate, buildings and improvements	1,643 61	
" paid 1884, for current expenses other than premiums	1,671 90	
" paid 1884, on previous indebtedness		
" remaining in the treasury	17 90	
" deficit the current year		
Totals	$4,948 16	$4,948 16

McHENRY COUNTY—MARENGO.

OFFICERS.—President, S. W. Sheldon, Marengo; Secretary, R. M. Ratrick, Marengo; Treasurer S. K. Bartholomo, Marengo.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$251 72
" received in 1884, fees (gate and entrance)		1,634 19
" booth rents and permits		158 15
" received 1884, sale shares stock		40 00
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$1,037 92	
" paid 1884, for real estate, buildings and improvements	22 65	
" paid 1884, for current expenses other than premiums	978 00	
" paid 1884, on previous indebtedness	145 49	
" remaining in the treasury		
" deficit the current year		
Totals	$2,184 06	$2,184 06

McLEAN COUNTY.

OFFICERS.—President, Sylvester Peasley, Downs; Secretary, A. L. Viney, Bloomington; Treasurer, George D. Deems, Bloomington.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$760 63
" booth rents and permits		114 90
" received 1884, sale shares stock		230 00
" received 1884, State appropriation		100 00
" received 1884, other sources		3 10
" paid 1884, in premiums	$309 75	
" paid 1884, for real estate, buildings and improvements	140 00	
" paid 1884, for current expenses other than premiums	362 27	
" paid 1884, on previous indebtedness	396 61	
" remaining in the treasury		
" deficit the current year		
Totals	$1,208 63	$1,208 63

MERCER COUNTY.

OFFICERS.—President, A. P. Petrie, New Windsor; Secretary, J. F. Henderson, Aledo; Treasurer, C. F. Durston, Aledo.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$212 60
" received in 1884, fees (gate and entrance)		3,067 50
" booth rents and permits		1,058 21
" received 1884		
" received 1884, State appropriation		100 00
" received 1884, other sources		949 25
" paid 1884, in premiums	$2,859 41	
" paid 1884, for real estate, buildings and improvements	785 45	
" paid 1884, for current expenses other than premiums	926 85	
" paid 1884, on previous indebtedness	695 66	
" remaining in the treasury	120 19	
" deficit the current year		
Totals	$5,387 56	$5,387 56

MONTGOMERY COUNTY.

OFFICERS.—President, James M. Truitt, Hillsboro; Secretary, Wm. H. Jackson, Hillsboro; Treasurer, Wm. H. Jackson, Hillsboro.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$1,240 00
" booth rents and permits		93 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		114 77
" paid 1884, in premiums	$853 50	
" paid 1884, for real estate, buildings and improvements	9 72	
" paid 1884, for current expenses other than premiums	628 73	
" paid 1884, on previous indebtedness	25 54	
" remaining in the treasury	30 28	
" deficit the current year		
Totals	$1,547 77	$1,547 77

MORGAN COUNTY.

OFFICERS.—President, W. C. Carter, Jacksonville; Secretary, J. M. Dunlap, Jacksonville; Treasurer, Marc. Hook, Jacksonville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report	....	$37 28
" received in 1884, fees (gate and entrance)	....	3,472 75
" booth rents and permits	....	701 00
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	95 00
" paid 1884, in premiums	$4,977 30	....
" paid 1884, for real estate, buildings and improvements	288 21	....
" paid 1884, for current expenses other than premiums	1,483 37	....
" paid 1884, on previous indebtedness	....	....
" remaining in the treasury	....	....
" deficit the current year	....	2,342 85
Totals	$6,748 88	$6,748 88

OGLE COUNTY—ROCHELLE.

OFFICERS.—President, J. A. Countryman, Rochelle; Secretary, G. W. Clark, Rochelle; Treasurer, J. T. Miller, Rochelle.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report	....	$254 20
" received in 1884, fees (gate and entrance)	....	1,503 07
" booth rents and permits	....	566 00
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	173 50
" paid 1884, in premiums	$1,718 50	....
" paid 1884, for real estate, buildings and improvements	663 62	....
" paid 1884, for current expenses other than premiums	....	....
" paid 1884, on previous indebtedness	....	....
" remaining in the treasury	214 65	....
" deficit the current year	....	....
Totals	$2,596 77	$2,596 77

PERRY COUNTY.

OFFICERS.—President, Alex. P. Baird, Pinckneyville; Secretary, E. H. Lemen, Pinckneyville; Treasurer, Wm. McNeil, Pinckneyville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report	....	$372 06
" received in 1884, fees (gate and entrance)	....	1,840 25
" booth rents and permits	....	628 70
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	952 60
" paid 1884, in premiums	$2,006 00	....
" paid 1884, for real estate, buildings and improvements	250 00	....
" paid 1884, for current expenses other than premiums	1,388 61	....
" paid 1884, on previous indebtedness	....	....
" remaining in the treasury	249 00	....
" deficit the current year	....	....
Totals	$3,893 61	$3,893 61

PIATT COUNTY.

OFFICERS.—President, Jesse W. Warner, Monticello; Secretary, C. A. Tatman, Monticello; Treasurer, R. V. Moore, Monticello.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury, last report	....	$2,411 18
" received in 1884, fees (gate and entrance)	....	3,251 59
" booth rents and permits	....	594 75
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	....
" received 1884, other sources	....	....
" paid 1884, in premiums	$1,475 75	....
" paid 1884, for real estate, buildings and improvements	1,973 27	....
" paid 1884, for current expenses other than premiums	963 50	....
" paid 1884, on previous indebtedness	....	....
" remaining in the treasury	1,845 00	....
" deficit the current year	....	....
Totals	$6,257 52	$6,257 52

PIKE COUNTY.

OFFICERS.—President, J. M. Bush, Sr., Pittsfield; Secretary, E. F. Binns, Pittsfield; Treasurer, W. B. Grimes, Pittsfield.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury, last report	....	....
" received in 1884, fees (gate and entrance)	....	$1,560 83
" booth rents and permits	....	436 25
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	358 65
" paid 1884, in premiums	$911 25	....
" paid 1884, for real estate, buildings and improvements	176 64	....
" paid 1884, for current expenses other than premiums	835 33	....
" paid 1884, on previous indebtedness	483 30	....
" remaining in the treasury	49 21	....
" deficit the current year	....	....
Totals	$2,455 73	$2,455 73

POPE COUNTY.

OFFICERS.—President, Wm. King, Rose Bud; Secretary, Thos. H. Sheridan, Golconda; Treasurer, Wm. P. Sloan, Golconda.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury, last report	....	$718 10
" received in 1884, fees (gate and entrance)	....	1,107 65
" booth rents and permits	....	200 00
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	154 20
" paid 1884, in premiums	$818 20	....
" paid 1884, for real estate, buildings and improvements	143 00	....
" paid 1884, for current expenses other than premiums	309 05	....
" paid 1884, on previous indebtedness	605 30	....
" remaining in the treasury	404 40	....
" deficit the current year	....	....
Totals	$2,279 95	$2,279 95

RANDOLPH COUNTY—Sparta.

Officers.—President, J. H. Dickey, Sparta; Secretary, J. C. Bratney, Sparta; Treasurer, J. A. McIlvain, Sparta.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$4 05
‘‘ received in 1884, fees (gate and entrance)		1,216 25
‘‘ booth rents and permits		213 00
‘‘ received 1884, sale shares stock		
‘‘ received 1884, State appropriation		100 00
‘‘ received 1884, other sources		444 30
‘‘ paid 1884, in premiums	$1,293 75	
‘‘ paid 1884, for real estate, buildings and improvements		
‘‘ paid 1884, for current expenses other than premiums	445 88	
‘‘ paid 1884, on previous indebtedness	235 18	
‘‘ remaining in the treasury	2 79	
‘‘ deficit the current year		
Totals	$1,977 60	$1,977 60

ROCK ISLAND COUNTY—Port Byron.

Officers.—President, A. F. Hollister, Port Byron; Secretary, A. Saddoris, Port Byron; Treasurer, Mark Ashdown, Port Byron.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$193 07
‘‘ received in 1884, fees (gate and entrance)		744 10
‘‘ booth rents and permits		185 20
‘‘ received 1884, sale shares stock		
‘‘ received 1884, State appropriation		100 00
‘‘ received 1884, other sources		96 40
‘‘ paid 1884, in premiums	$661 95	
‘‘ paid 1884, for real estate, buildings and improvements		
‘‘ paid 1884, for current expenses other than premiums	460 95	
‘‘ paid 1884, on previous indebtedness		
‘‘ remaining in the treasury	195 87	
‘‘ deficit the current year		
Totals	$1,318 77	$1,318 77

SALINE COUNTY—Harrisburg.

Officers.—President, W. E. Burnett, Harrisburg; Secretary, F. M. Pickett, Harrisburg: Treasurer, J. M. Baker, Harrisburg.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1,390 64
‘‘ received in 1884, fees (gate and entrance)		648 60
‘‘ booth rents and permits		334 15
‘‘ received 1884, sale shares stock		
‘‘ received 1884, State appropriation		100 00
‘‘ received 1884, other sources		621 66
‘‘ paid 1884, in premiums	$1,106 50	
‘‘ paid 1884, for real estate, buildings and improvements		
‘‘ paid 1884, for current expenses other than premiums	465 25	
‘‘ paid 1884, on previous indebtedness	128 05	
‘‘ remaining in the treasury	1,395 25	
‘‘ deficit the current year		
Totals	$3,095 05	$3,095 05

SALINE COUNTY—ELDORADO.

OFFICERS.—President, John Yost, Eldorado; Secretary, Geo. B. Parsons, Eldorado; Treasurer, J. H. Musgrove, Eldorado.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$2,120 17
" booth rents and permits		460 50
" received 1884, sale shares stock		70 00
" received 1884, State appropriation		
" received 1884, other sources		203 00
" paid 1884, in premiums	$1,980 25	
" paid 1884, for real estate, buildings and improvements	73 75	
" paid 1884, for current expenses other than premiums	1,177 00	
" paid 1884, on previous indebtedness	81 40	
" remaining in the treasury		
" deficit the current year		458 73
Totals	$3,312 40	$3,312 40

SCHUYLER COUNTY.

OFFICERS.—President, Edwin M. Anderson, Rushville; Secretary, John S. Bagby, Rushville; Treasurer, George C. Ray, Rushville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$2,646 60
" booth rents and permits		315 60
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$1,832 25	
" paid 1884, for real estate, buildings and improvements	704 88	
" paid 1884, for current expenses other than premiums	417 78	
" paid 1884, on previous indebtedness	355 54	
" remaining in the treasury		
" deficit the current year		248 25
Totals	$3,310 45	$3,310 45

SHELBY COUNTY.

OFFICERS.—President, John A. Tackett, Shelbyville; Secretary, Geo. A. Roberts, Shelbyville; Treasurer, W. C. Headen, Shelbyville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$869 54
" received in 1884, fees (gate and entrance)		2,442 02
" booth rents and permits		221 35
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums	$1,487 50	
" paid 1884, for real estate, buildings and improvements	1,400 00	
" paid 1884, for current expenses other than premiums	443 81	
" paid 1884, on previous indebtedness		
" remaining in the treasury	301 60	
" deficit the current year		
Totals	$3,632 91	$3,632 91

STARK COUNTY—Toulon.

Officers.—President, Cyrus Bocock, Wyoming; Secretary, James Nowlan, Toulon; Treasurer, Samuel Burge, Toulon.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$27 71
'' received in 1884, fees (gate and entranee)		2,284 15
'' booth rents and permits		1,003 18
'' received 1884, sale shares stock		
'' received 1884, State appropriation		100 00
'' received 1884, other sources		1,400 00
'' paid 1884, in premiums	$1,826 75	
'' paid 1884, for real estate, buildings and improvements		
'' paid 1884, for current expenses other than premiums	1,363 42	
'' paid 1884, on previous indebtedness	112 00	
'' remaining in the treasury	1,512 84	
'' deficit the current year		
Totals	$4,815 01	$4,815 01

STARK COUNTY—Wyoming.

Officers.—President, Richard Davidson, LaPrairie; Secretary, A. G. Hammond, Wyoming; Treasurer, Jacob Graves, Wyoming.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$90 00
'' received in 1884, fees (gate and entrance)		2,950 73
'' booth rents and permits		544 65
'' received 1884, sale shares stock		
'' received 1884, State appropriation		100 00
'' received 1884, other sources, for hay and use of grounds		135 67
'' paid 1884, in premiums	$1,869 50	
'' paid 1884, for real estate, buildings and improvements		
'' paid 1884, for current expenses other than premiums	1,606 84	
'' paid 1884, on previous indebtedness	153 92	
'' remaining in the treasury	190 79	
'' deficit the current year		
Totals	$3,821 05	$3,821 05

ST. CLAIR COUNTY.

Officers.—President, Joseph Reichert, Freeburg; Secretary, Don Turner, Belleville; Treasurer, M. T. Stookey, Belleville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1,729 25
'' received in 1884, fees (gate and entrance)		2,675 80
'' booth rents and permits		1,579 00
'' received 1884, sale shares stock		1,200 00
'' received 1884, State appropriation		100 00
'' received 1884, other sources		615 35
'' paid 1884, in premiums	$3,241 50	
'' paid 1884, for real estate, buildings and improvements		
'' paid 1884, for current expenses other than premiums	4,592 42	
'' paid 1884, on previous indebtedness		
'' remaining in the treasury	65 48	
'' deficit the current year		
Totals	$7,899 40	$7,899 40

TAZEWELL COUNTY—DELAVAN.

OFFICERS.—President, Ira B. Hall, Delavan; Secretary, D. B. Pittsford, Delavan; Treasurer, R. Frey, Delavan.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$3,245 70
" booth rents and permits		613 90
" received 1884, sale shares stock		10 00
" received 1884, State appropriation		100 00
" received 1884, other sources		127 34
" paid 1884, in premiums	$2,003 45	
" paid 1884, for real estate, buildings and improvements	331 66	
" paid 1884, for current expenses other than premiums	1,091 57	
" paid 1884, on previous indebtedness	670 26	
" remaining in the treasury		
" deficit the current year		
Totals	$4,096 94	$4,096 94

TAZEWELL COUNTY—MACKINAW.

OFFICERS.—President, D. W. Puterbaugh, Lilly; Secretary, R. V. Howe, Mackinaw; Treasurer, John H. Porter, Mackinaw.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$911 96
" booth rents and permits		157 05
" received 1884, sale shares stock		30 95
" received 1884, State appropriation		100 00
" received 1884, other sources		221 07
" paid 1884, in premiums	$390 45	
" paid 1884, for real estate, buildings and improvements	734 71	
" paid 1884, for current expenses other than premiums	319 63	
" paid 1884, on previous indebtedness	487 67	
" remaining in the treasury	18 57	
" deficit the current year		530 00
Totals	$1,951 03	$1,951 03

UNION COUNTY—ANNA.

OFFICERS.—President, M. V. Ussery, Anna; Secretary, E. R. Juinett, Anna; Treasurer, R. B. Stinson, Anna.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$383 29
" received in 1884, fees (gate and entrance)		1,723 60
" booth rents and permits		555 20
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		91 64
" paid 1884, in premiums	$1,615 25	
" paid 1884, for real estate, buildings and improvements	627 31	
" paid 1884, for current expenses other than premiums	764 89	
" paid 1884, on previous indebtedness	439 25	
" remaining in the treasury	7 03	
" deficit the current year		600 00
Totals	$3,453 73	$3,453 73

UNION COUNTY—JONESBORO.

OFFICERS.—President, Florence W. Green, Jonesboro; Secretary, Jos. H. Samson, Jonesboro; Treasurer, Chas. Barringer, Jonesboro.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury, last report	....	$327 60
" received in 1884, fees (gate and entrance)	....	1,733 45
" booth rents and permits	....	391 50
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	36 81
" paid 1884, in premiums	$1,515 95	....
" paid 1884, for real estate, buildings and improvements	625 31	....
" paid 1884, for current expenses other than premiums	415 38	....
" paid 1884, on previous indebtedness	....	....
" remaining in the treasury	32 72	....
" deficit the current year	....	....
Totals	$2,589 36	$2,589 36

VERMILION COUNTY—CATLIN.

OFFICERS.—President, G. W. Wolfe, Catlin; Secretary, S. A. McGregor, Catlin; Treasurer, A. Jones, Catlin.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury, last report	....	$779 99
" received in 1884, fees (gate and entrance)	....	1,387 75
" booth rents and permits	....	249 05
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	....
" received 1884, other sources	....	320 11
" paid 1884, in premiums	$1,031 25	....
" paid 1884, for real estate, buildings and improvements	....	....
" paid 1884, for current expenses other than premiums	1,092 30	....
" paid 1884, on previous indebtedness	....	....
" remaining in the treasury	613 35	....
" deficit the current year	....	....
Totals	$2,736 90	$2,736 90

VERMILION COUNTY—HOOPESTON.

OFFICERS.—President, James A. Cunningham, Hoopeston; Secretary, Dale Wallace, Hoopeston; Treasurer, Wm. Moore, Hoopeston.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury, last report	....	$519 43
" received in 1884, fees (gate and entrance)	....	3,145 76
" booth rents and permits	....	841 50
" received 1884, sale shares stock	....	....
" received 1884, State appropriation	....	100 00
" received 1884, other sources	....	44 00
" paid 1884, in premiums	$2,655 98	....
" paid 1884, for real estate, buildings and improvements	1,457 19	....
" paid 1884, for current expenses other than premiums	717 22	....
" paid 1884, on previous indebtedness	....	....
" remaining in the treasury	20 30	....
" deficit the current year	....	200 00
Totals	$4,850 69	$4,850 69

VERMILION COUNTY—DANVILLE.

OFFICERS.—President, W. J. Moore, Danville; Secretary, Leslie Paris, Danville; Treasurer, Charles K. Mires, Danville.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
“ received in 1884, fees (gate and entrance)		$3,692 15
“ booth rents and permits		425 50
“ received 1884, sale shares stock		234 00
“ received 1884, State appropriation		
“ received 1884, other sources		57 90
“ paid 1884, in premiums	$3,842 25	
“ paid 1884, for real estate, buildings and improvements	201 50	
“ paid 1884, for current expenses other than premiums	526 40	
“ paid 1884, on previous indebtedness	79 80	
“ remaining in the treasury		
“ deficit the current year		240 40
Totals	$4,649 95	$4,649 95

WARREN COUNTY.

OFFICERS.—President, John T. Reichard, Monmouth; Secretary, G. C. Rankin, Monmouth; Treasurer, W. S. Hubbard, Monmouth.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$18 11
“ received in 1884, fees (gate and entrance)		3,822 50
“ booth rents and permits		417 50
“ received 1884, sale shares stock		
“ received 1884, State appropriation		100 00
“ received 1884, other sources		24 06
“ paid 1884, in premiums	$2,998 50	
“ paid 1884, for real estate, buildings and improvements	150 00	
“ paid 1884, for current expenses other than premiums	1,019 67	
“ paid 1884, on previous indebtedness	200 00	
“ remaining in the treasury	14 00	
“ deficit the current year		
Totals	$4,382 17	$4,382 17

WHITE COUNTY.

OFFICERS.—President, Elois Stinnett, Carmi; Secretary, Frank E. Pomeroy, Carmi; Treasurer, J. I. McClintock, Carmi.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$280 66
“ received in 1884, fees (gate and entrance)		3,214 25
“ booth rents and permits		1,225 40
“ received 1884, sale shares stock		
“ received 1884, State appropriation		
“ received 1884, other sources		488 05
“ paid 1884, in premiums	$2,641 00	
“ paid 1884, for real estate, buildings and improvements		
“ paid 1884, for current expenses other than premiums	1,686 83	
“ paid 1884, on previous indebtedness	800 00	
“ remaining in the treasury	80 53	
“ deficit the current year		
Totals	$5,208 36	$5,208 36

WHITESIDE COUNTY—STERLING.

OFFICERS.—President, Moses Dillon, Sterling; Secretary, H. V. Aumert, Sterling; Treasurer, A. Bayliss, Sterling.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1,218 83
" received 1884, fees (gate and entrance)		4,744 93
" booth rents and permits		441 10
" received 1884, sale shares stock		180 00
" received 1884, State appropriation		100 00
" received 1884, other sources		625 40
" paid 1884, in premiums	$2,917 65	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	5,523 94	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit the current year		1,131 33
Totals	$8,441 59	$8,441 59

WHITESIDE COUNTY—MORRISON.

OFFICERS.—President, R. E. Logan, Morrison; Secretary, Ed. J. Congar, Morrison; Treasurer, Geo. H. Brown, Morrison.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$2,534 05
" booth rents and permits		328 25
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		334 40
" paid 1884, in premiums	$1,471 50	
" paid 1884, for real estate, buildings and improvements	250 00	
" paid 1884, for current expenses other than premiums	1,092 02	
" paid 1884, on previous indebtedness	753 37	
" remaining in the treasury		
" deficit the current year		270 19
Totals	$3,566 89	$3,566 89

WHITESIDE COUNTY—ALBANY.

OFFICERS.—President, E. H. Nevitt, Albany; Secretary, J. F. Happer, Albany; Treasurer, J. B. Kearns, Garden Plain.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$750 00
" booth rents and permits		183 75
" received 1884, sale shares stock		
" received 1884, State appropriation		
" received 1884, other sources		
" paid 1884, in premiums	$900 00	
" paid 1884, for real estate, buildings and improvements	250 00	
" paid 1884, for current expenses other than premiums	452 82	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit the current year		699 07
Totals	$1,602 82	$1,602 82

WILLIAMSON COUNTY.

OFFICERS.—President, A. T. Benson, Marion; Secretary, John W. Burton, Marion; Treasurer, C. M. Kern, Marion.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$4 90
" received in 1884, fees (gate and entrance)		1,453 70
" booth rents and permits		402 60
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		102 50
" paid 1884, in premiums	$1,326 50	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	645 64	
" paid 1884, on previous indebtedness		
" remaining in the treasury	91 56	
" deficit the current year		
Totals	$2,063 70	$2,063 70

WINNEBAGO COUNTY.

OFFICERS.—President, L. McDonald, Pecatonica; Secretary, F. H. Kimball, Rockford; Treasurer, G. A. Sandford, Rockford.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$147 89
" received in 1884, fees (gate and entrance)		6,238 95
" booth rents and permits		497 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		172 08
" paid 1884, in premiums	$2,644 00	
" paid 1884, for real estate, buildings and improvements	617 72	
" paid 1884, for current expenses other than premiums	2,616 44	
" paid 1884, on previous indebtedness		
" remaining in the treasury	1,277 76	
" deficit the current year		
Totals	$7,155 92	$7,155 92

WOODFORD COUNTY.

OFFICERS.—President, Ed. Hodgson, El Paso; Secretary, Walter Bennett, El Paso; Treasurer, F. T. Waite, El Paso.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$53 19
" received in 1884, fees (gate and entrance)		2,369 60
" booth rents and permits		182 15
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		140 95
" paid 1884, in premiums	$1,663 78	
" paid 1884, for real estate, buildings and improvements	300 00	
" paid 1884, for current expenses other than premiums	533 05	
" paid 1884, on previous indebtedness		
" remaining in the treasury	349 06	
" deficit the current year		
Totals	$2,845 89	$2,845 89

DOUGLAS COUNTY.

OFFICERS.—President, Isaac Casler, Galton; Secretary, A. M. Wood, Tuscola; Treasurer, W. R. Johnson, Tuscola.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$1 16
" received in 1884, fees (gate and entrance)		449 90
" booth rents and permits		49 10
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		
" paid 1884, in premiums		
" paid 1884, for real estate, buildings and improvements	$136 00	
" paid 1884, for current expenses other than premiums	359 94	
" paid 1884, on previous indebtedness	100 00	
" remaining in the treasury	4 22	
" deficit the current year		
Totals	$600 16	$600 16

MACON COUNTY.

OFFICERS.—President, J. G. Willard, Harristown; Secretary, J. C. Hostetler, Decatur; Treasurer, Milton Johnson, Decatur.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$327 74
" received in 1884, fees (gate and entrance)		1,607 75
" booth rents and permits		260 45
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources, for stall rents and rent of grounds		318 00
" paid 1884, in premiums	$1,201 40	
" paid 1884, for real estate, building and improvements	340 09	
" paid 1884, for current expenses other than premiums	678 66	
" paid 1884, on previous indebtedness	377 98	
" remaining in the treasury	15 81	
" deficit the current year		
Total	$2,613 94	$2,613 94

ROCK ISLAND COUNTY—HILLSDALE.

OFFICERS.—President, N. B. Joslin, Hillsdale; Secretary, N. J. Blackman, Joslin; Treasurer, Jasper Sell, Hillsdale.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$42 50
" received in 1884, fees (gate and entrance)		630 52
" booth rents and permits		128 15
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		78 15
" paid 1884, in premiums	$475 00	
" paid 1884, for real estate, buildings and improvements	63 00	
" paid 1884, for current expenses other than premiums	362 48	
" paid 1884, on previous indebtedness	77 95	
" remaining in the treasury	89	
" deficit the current year		
Totals	$979 32	$979 32

SANGAMON COUNTY.

OFFICERS.—President, Geo. Pickrell, Lanesville; Secretary, Jas. A. Winston, Springfield; Treasurer, E. A. Hall, Springfield.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$61 44
" received in 1884, fees (gate and entrance) " booth rents and permits " received 1884, sale shares stock " received 1884, State appropriation " received 1884, other sources		7,086 53
" paid 1884, in premiums	$2,917 50	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	1,368 22	
" paid 1884, on previous indebtedness	2,862 25	
" remaining in the treasury		
" deficit the current year		
Totals	$7,147 97	$7,147 97

ILLINOIS STATE FAIR.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$23,743 70
" received in 1884, fees (gate and entrance)		23,844 00
" booth rents and permits, stall and pen fees		7,145 00
" received 1884, State Statistical Agent, A. Hurlbut, straw and lumber		1,899 25
" received 1884, State appropriation		4,000 00
" received 1884, other sources		90 00
" paid 1884, in premiums	$20,307 62	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	16,468 39	
" paid 1884, deficit Fat-Stock Show	139 39	
" remaining in the treasury	23,806 55	
" deficit the current year		
Totals	$60,721 95	$60,721 95

FAT-STOCK SHOW.

FINANCIAL EXHIBIT FOR 1884.

Amount deficit last report	$1,890 32	
" received in 1884, fees (gate and entrance)		$7,789 95
" subscriptions		3,670 00
" received 1884, sale shares stock		
" received 1884, State appropriation		1,000 00
" received 1884, other sources		910 00
" paid 1884, in premiums	4,920 00	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	8,589 34	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit		$2,029 71
Totals	$15,399 66	$15,399 66

ILLINOIS STATE FAIR.

Report of Exhibition for 1884.

Departments.	No. of entries.	Amount of premiums offered to each department....	Amount of premiums paid to each department....
A—Cattle	254	$4,395 00	$3,610 00
B—Horses and Equestrianism	773	4,391 00	3,883 00
B—Mules and Asses	......	475 00	....
C—Sheep	409	1,880 00	1,485 00
D—Swine	532	1,835 00	1,775 00
E—Poultry	497	857 00	534 00
F—Mechanic Arts—Stoves, castings, worked metals, household furniture, dairy utensils, manufactures of various kinds, leather, etc., sewing and knitting machines and spinning wheels, miners' tools, coal mining machinery and appliances	65	....	....
G—Farm Products—Grains, seeds, vegetables, butter, cheese, break, cakes, etc	426	1,198 00	625 00
H—Horticulture and Floriculture—Trees, fruits, flowers, plants canned and preserved fruits, jellies, pickles, etc	308	1,530 00	1,248 00
I—Fine Arts—Sculpture, painting, drawing, wax, feather and hair work, etc	271	478 00	430 00
K—Textile Fabrics—Mill fabrics, household fabrics and needle work	1,047	753 00	712 00
L—Education and Science—Taxidermy, mineralogy, and conchology, entomology, musical instruments, printing, engraving and architectural and mechanical drawings	591	1,059 50	800 50
M—Speed	36	5,700 00	4,597 50
N—Agricultural Implements	579	....	....
Miscellaneous—Silver medals, etc	8	....	607 62
Totals	5,789	$24,551 50	$20,307 62

FAT-STOCK SHOW.

Report of Exhibition for 1884.

Departments.	No. of entries.	Amount of premiums offered	Amount of premiums paid..
A—Cattle	434	$4,655 00	$2,835 00
B—Horses	53	....	....
C—Sheep	91	1,300 00	1,020 00
D—Swine	101	1,250 00	1,065 00
Miscellaneous—Special premiums	.....	....	3,763 00
Totals	679	$7,205 00	$8,683 00

S. D. Fisher,
Secretary.

JOHN LANDRIGAN,
President State Board of Agriculture.

ILLINOIS AGRICULTURAL FAIRS—1884.

Number of Entries, Amount of Premiums Offered, and Amount of Premiums Paid by each Association.

LIVE STOCK EXHIBIT.

COUNTIES.	Location of Fair.	CATTLE.			HORSES.			MULES AND ASSES.			SHEEP.			HOGS.		
		No. entries	Amount premiums offered...	Amount premiums paid......	No. entries	Amount premiums offered...	Amount premiums paid......	No. entries	Amount premiums offered...	Amount premiums paid......	No. entries	Amount premiums offered...	Amount premiums paid	No. entries	Amount premiums offered...	Amount premiums paid ......
Adams........	Camp Point..	118	$993 00	$700 00	355	$719 00	$700 00	33	$99 00	$80 00	105	$174 00	$160 00	163	$262 00	$254 00
Alexander...	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Bond.........	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Boone........	Belvidere	8	300 00	11 00	111	236 00	161 00	......	......	......	25	72 00	31 00	27	187 00	50 00
Brown........	Mt. Sterling..	27	280 00	76 50	244	561 00	511 00	30	108 00	70 00	58	162 00	145 50	73	320 00	266 00
Bureau.......	Princeton	77	881 00	651 00	182	709 00	575 00	1	27 00	10 00	47	136 00	108 00	140	391 00	298 00
Calhoun......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Carroll.......	Mt. Carroll...	70	677 00	265 00	188	535 75	329 50	1	17 50	4 50	11	132 50	30 50	23	296 25	79 00
Cass..........	Virginia	38	277 00	183 40	186	1,003 00	595 60	......	......	......	1	5 00	3 50	15	84 00	38 50
Champaign..	Champaign ..	48	419 00	328 00	278	491 00	427 00	10	43 00	32 00	38	142 00	75 00	93	125 00	95 00
Christian.....	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Clark.........	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Clay..........	Flora	20	204 00	110 16	30	332 00	179 28	10	81 00	45 26	18	95 00	51 30	20	128 00	69 12
Clinton	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Coles.........	Charleston...	101	1,088 00	702 00	245	620 00	575 25	8	55 00	42 50	14	85 00	38 50	83	354 00	195 50
Cook.........	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Crawford	Robinson.....	29	283 00	136 00	78	420 00	225 00	7	71 00	46 00	45	166 00	71 00	57	154 00	108 00
Cumberland.	Toledo.......	22	307 00	147 00	7	59 00	23 00	7	54 00	19 00	16	352.00	53 00	26	119 00	46 00
DeKalb.......	Sycamore	44	504 00	113 00	131	302 00	197 00	1	18 00	5 00	14	90 00	45 00	36	108 00	61 00
DeWitt.......	Clinton	46	523 00	226 00	306	348 00	263 00	13	39 00	35 00	27	81 00	56 50	51	126 00	107 00
DeWitt.......	Farmer City..	97	600 00	333 00	300	595 00	571 00	9	34 00	23 00	50	69 00	56 00	97	221 00	182 00
Douglas......	Tuscola.......	29	210 00	......	72	320 00	......	3	50 00	......	10	60 00	......	8	260 00	......
DuPage......	Wheaton	7	316 00	21 00	45	429 00	161 00	......	18 00	......	17	58 00	21 50	7	80 00	22 00
Edgar.	Paris	80	837 00	778 00	296	625 00	612 00	11	56 00	56 00	22	90 00	69 00	102	246 00	257 00
Edwards.....	Albion	49	176 00	120 50	98	441 00	390 00	16	31 00	30 00	28	76 50	55 00	54	172 50	114 50
Effingham ...	Effingham....	75	173 00	79 00	20	83 00	57 00	......	......	......	19	89 00	49 00	32	178 00	141 00
Fayette	Vandalia	60	310 50	37 50	200	403 00	59 75	......	......	......	28	98 00	15 90	27	139 00	9 00

Ford	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Franklin	Benton	27	228 50	108 50	117	537 50	362 50	34	147 00	140 00	7	58 00	25 00	32	120 50	72 50
Fulton	Canton	32	310 00	185 00	120	260 00	223 00	6	21 00	21 00	78	142 00	128 00	15	130 00	80 00
Fulton	Avon	105	752 00	150 00	253	364 00	170 00	......	......	......	65	98 00	66 00	176	241 00	90 00
Gallatin	Shawneeto'n	69	520 00	375 50	121	735 00	532 00	14	107 00	49 00	26	130 00	77 50	68	274 00	196 00
Greene	Carrollton	21	431 00	109 00	341	622 00	492 00	21	81 00	75 00	40	114 00	74 00	93	155 00	150 00
Grundy	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Hamilton	McLeansboro	46	588 00	180 00	143	362 50	279 75	14	41 25	27 75	41	170 00	66 50	36	262 00	72 00
Hancock	Carthage	88	655 00	426 00	490	1,385 00	1,008 00	31	76 00	72 00	95	132 00	130 00	243	409 00	397 00
Hancock	Warsaw	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Hardin	Elizabethto'n	21	78 50	74 00	60	208 50	163 50	19	64 50	77 00	2	21 00	6 00	1	17 00	4 00
Henderson	Biggsville	63	450 00	248 00	135	489 00	438 00	4	26 00	15 00	28	47 50	40 00	58	152 00	128 00
Henry	Cambridge	35	675 00	407 00	80	485 00	374 00	......	......	......	21	105 00	87 00	22	150 00	101 00
Iroquois	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Jackson	Murphysboro	6	325 00	13 00	52	324 00	171 00	5	129 00	......	1	147 00	5 00	29	128 00	89 50
Jackson	Carbondale	56	1,210 00	410 00	90	626 00	257 50	21	80 00	80 00	19	108 00	72 00	31	172 50	123 50
Jasper	Newton	28	354 00	100 00	81	460 00	246 00	8	66 00	22 00	28	108 00	74 00	47	220 00	119 00
Jefferson	Mt. Vernon	54	325 00	266 00	128	463 00	350 00	24	132 00	88 00	35	123 00	78 00	79	129 00	125 00
Jersey	Jerseyville	......	......	......	463	998 00	978 00	19	85 00	80 00	28	144 00	72 00	132	300 00	295 00
JoDaviess	Galena	50	123 00	88 00	73	257 00	192 00	5	15 00	11 25	21	48 00	38 00	46	126 00	80 00
JoDaviess	Warren	67	182 50	147 50	49	189 50	119 00	......	......	......	9	24 00	18 00	6	34 50	18 50
Johnson	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Kane	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Kankakee	Kankakee	41	570 00	126 40	197	395 00	218 40	2	15 00	8 00	......	170 00	......	72	214 00	64 80
Kendall	Yorkville	37	368 50	93 50	128	308 00	199 50	......	......	......	22	55 50	36 50	42	108 00	48 50
Knox	Knoxville	137	700 00	610 00	213	350 00	350 00	25	100 00	25 00	90	111 00	65 00	57	150 00	100 00
Lake	Libertyville	58	401 00	105 00	118	273 50	97 00	1	2 00	2 00	39	66 00	54 00	27	138 00	48 50
Lake	Waukegan	42	844 50	195 00	120	400 00	271 00	......	......	......	36	261 00	119 50	35	225 00	100 00
LaSalle	Mendota	43	678 00	333 00	198	833 00	613 00	......	......	......	45	153 00	102 00	57	215 00	156 00
Lawrence	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Lee	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Livingston	Fairbury	50	1,268 00	323 00	281	1,213 00	837 00	8	47 00	19 00	41	162 00	129 00	67	164 00	144 00
Logan	Lincoln	80	671 50	369 50	419	685 50	591 00	12	68 00	27 50	40	94 50	57 50	127	196 00	188 00
Logan	Atlanta	83	585 00	393 00	341	738 00	505 00	4	55 00	24 00	39	72 00	45 00	63	196 00	169 00
Macon	Decatur	48	726 00	184 80	196	502 00	213 40	10	54 00	19 80	19	92 00	36 85	95	353 00	188 65
Macoupin	Carlinville	......	......	......	186	528 00	455 00	10	60 00	30 00	22	123 00	86 00	60	174 00	154 00
Madison	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Marion	Salem	39	317 00	211 00	121	409 00	305 50	22	107 00	69 00	14	77 00	36 00	21	145 00	76 00
Marshall	Wenona	......	......	......	352	1,076 00	840 00	11	108 00	51 00	120	225 00	217 00	206	254 00	250 00
Mason	Havana	9	219 00	20 50	110	378 00	81 00	6	100 00	7 50	2	99 00	5 00	11	156 00	30 50
Massac	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
McDonough	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
McHenry	Woodstock	115	512 00	220 00	182	358 00	240 50	7	23 00	17 00	35	235 00	67 00	50	192 00	90 00
McHenry	Marengo	119	292 00	194 00	105	295 00	171 00	......	......	......	34	65 00	35 50	57	144 00	96 00
McLean	Bloomington	11	766 00	73 00	56	722 00	518 00	10	101 00	85 00	30	92 00	65 00	106	270 00	249 00
McLean	Bloomington	10	213 00	22 00	134	135 00	95 50	......	6 00	......	16	19 50	19 00	27	39 00	12 00
Menard	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Mercer	Aledo	28	775 00	313 00	213	682 00	534 00	5	49 00	12 00	60	123 00	119 00	97	275 00	250 00
Monroe	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Montgomery	Hillsboro	17	286 75	127 50	156	342 00	220 00	11	73 00	34 00	12	43 00	31 00	25	92 00	82 00
Morgan	Jacksonville	57	1,288 75	506 25	271	873 00	718 00	23	70 50	70 50	61	281 00	276 00	67	252 00	194 00
Moultrie	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......

Illinois Agricultural Fairs, 1884—Continued.

COUNTIES.	Location of Fair.	CATTLE.			HORSES.			MULES AND ASSES.			SHEEP.			HOGS.		
		No. entries....	Amount premiums offered...	Amount premiums paid......	No. entries......	Amount premiums offered..	Amount premiums paid......	No. entries.....	Amount premiums offered...	Amount premiums paid......	No. entries......	Amount premiums offered...	Amount premiums paid......	No. entries......	Amount premiums offered...	Amount premiums paid......
Ogle..........	Rochelle.	74	$560 00	$250 00	245	$538 50	$531 00	5	$36 00	$15 00	54	$152 00	$110 00	61	$155 00	$115 00
Peoria........																
Perry	Pinckneyville	31	220 00	116 00	68	420 00	310 00	9	92 00	58 00	10	29 50	20 00	25	90 00	61 00
Piatt..........	Monticello ...	42	400 50	310 50	116	475 00	342 50	7	27 50	17 50	13	63 00	31 00	66	125 00	95 00
Pike..........	Pittsfield	33	316 00	61 00	227	735 00		18	78 00	29 00	37	138 00	64 00	69	207 00	99 50
Pope..........	Golconda	24	101 00	94 50	81	210 00	203 50	21	99 00	82 50	16	69 50	62 50	16	60 00	55 00
Pulaski																
Putnam.......																
Randolph....	Sparta........	62	352 00	153 00	95	604 00	531 50				36	137 50	87 50	15	177 00	35 50
Richland																
Rock Island..	Hillsdale	13	150 00	46 50	52	173 00	133 00	4	13 25	5 50	6	35 50	18 50	16	200 00	42 50
Rock Island..	Port Byron ..	74	243 75	119 25	39	140 25	65 00				6	14 50	10 00	21	158 00	31 00
Saline.........	Harrisburg ..	91	227 50	182 50	119	324 50	244 00	19	107 00	58 00	43	97 50	59 00	33	110 50	64 50
Saline.........	Eldorado	30	431 00	178 00	97	512 50	387 00	20	152 50	81 50	21	112 00	52 00	33	181 00	92 50
Sangamon...	Springfield...	70	1,690 00	1,014 00	213	1,091 00	654 60		150 00		24	218 00	126 60	101	290 00	170 00
Schuyler.....	Rushville.....	44	339 00	146 00	171	563 00	430 50	10	42 00	33 50	35	116 00	89 00	53	228 00	130 00
Scott..........																
Shelby........	Shelbyville...	52	381 00	343 00	157	450 00	434 00	7	64 00	37 00	62	117 00	117 00	34	120 00	110 00
Stark..........	Toulon.........	48	631 00	244 00	183	680 00	585 00				40	177 00	111 00	71	210 00	121 00
Stark..........	Wyoming	43	524 00	223 00	102	581 00	420 00	3	29 00	12 00	31	168 00	114 00	45	173 00	98 00
St. Clair......	Belleville.....	120	1,190 00	467 00	201	1,065 00	582 00	17	58 00	48 00	71	362 00	254 00	60	394 00	175 00
Stephenson..																
Tazewell.....	Delavan	51	525 00	258 50	317	542 00	487 60	9	54 00	35 00	62	94 50	92 00	50	222 50	103 50
Tazewell.....	Mackinaw....	41	101 00	28 50	285	285 70	138 95	14	23 00	17 00	26	27 50	22 00	76	59 00	37 00
Union.........	Anna	24	727 00	158 00	69	594 00	169 00	36	102 00	77 00	9	80 00	16 00	13	132 50	40 50
Union.........	Jonesboro....	53	309 50	169 00	97	316 00	301 00	36	166 50	107 00	48	83 00	66 50	33	105 00	87 50
Vermilion....	Hoopeston....	46	1,122 00	858 00	203	724 00	503 00	8	47 00	34 00	63	66 00	46 00	100	328 00	168 00
Vermilion....	Catlin.........	13	210 00	52 00	163	1,078 00	672 00	13	45 00	29 00	37	73 00	51 00	28	80 00	66 00
Vermilion....	Danville......	43	896 00	746 50	149	840 50	840 50	19	48 00	48 00	49	139 00	139 00	56	177 00	172 00
Wabash......																
Warren.......	Monmouth....	47	516 00	296 00	215	862 50	709 00				53	99 00	99 00	90	315 00	300 00
Washington.																
Wayne.......																
White	Carmi	45	411 00	296 50	124	635 00	456 00	14	69 00	62 00	14	104 00	54 00	40	152 00	92 00

Whiteside....	Sterling	146	702 00	454 50	107	621 00	286 00	......	....	....	43	120 00	74 00	94	115 00	100 00
Whiteside....	Morrison	76	348 00	240 00	86	187 00	160 00	1	20 00	5 00	41	77 00	70 00	47	127 00	104 00
Whiteside....	Albany	60	476 00	206 00	87	284 00	156 00	1	10 00	6 00	7	15 00	15 00	14	64 00	38 00
Will..........	....	......	....	.....	.....	....	....	......	....	....	....	....	....	....	....	....
Williamson..	Marion	42	180 00	104 00	43	375 00	201 00	25	124 00	100 00	16	102 00	40 50	28	175 00	85 00
Winnebago..	Rockford.....	186	655 00	426 00	153	436 00	302 00	......	....	......	46	90 00	81 00	51	184 00	92 00
Woodford....	El Paso	......	....	....	314	650 00	434 50	2	45 00	9 00	19	140 00	64 00	31	312 00	68 00
State Fair ...	Chicago	254	4,395 00	3,610 00	773	4,391 00	3,883 00	......	475 00	....	409	1,880 00	1,485 00	532	1,835 00	1,775 00
Fat St'k Show	Chicago	434	4,455 00	2,835 00	53	....	....	......	....	......	91	1,300 00	1,020 00	101	1,250 00	1,065 00
Totals......	....	5,249	$52,063 25	$27,415 76	15,729	$50,891 20	$36,615 58	870	$5,090 50	$2,764 00	3,452	$13,007 00	$8,555 15	5,725	$19,434 75	$13,113 57

Exhibit Illinois Agricultural Fairs, 1884—Continued.

COUNTIES.	Location of Fair.	POULTRY.			MECHANIC ARTS.			FARM PRODUCTS.			HORTICULTURE AND FLORICULTURE.			FINE ARTS.		
		No. entries....	Amount premiums offered.	Amount premiums paid....	No. entries....	Amount premiums offered.	Amount premiums paid....	No. entries....	Amount premiums offered.	Amount premiums paid....	No. entries....	Amount premiums offered.	Amount premiums paid	No. entries....	Amount premiums offered.	Amount premiums paid....
Adams........	Camp Point..	126	$82 50	$64 50	26	$44 00	$35 00	813	$356 50	$312 00	814	$278 75	$218 50	177	$147 00	$100 50
Alexander...																
Bond........																
Boone.........	Belvidere	60	100 50	35 50	11	43 00	21 00	109	61 00	39 00	94	84 00	70 00	108	62 00	54 00
Brown.........	Mt. Sterling..	26	50 00	23 50	31	90 25	56 25	123	54 50	41 50	424	175 75	144 75	51	43 00	30 50
Bureau.. ...	Princeton	129	146 25	93 75	15	58 50	16 00	157	82 50	74 50	463	333 75	220 08	56	67 50	49 50
Calhoun......																
Carroll.......	Mt.Carroll....	13	44 50	9 25				39	20 00	19 75	177	90 25	77 25	68	85 50	51 50
Cass	Virginia	7	17 40	3 50	2	7 50	3 50	97	105 00	56 00	335	91 50	63 35	62	82 00	33 95
Champaign..	Champaign ..	82	53 00	46 00	157	134 00	116 00	132	118 00	88 00	197	109 50	89 00	181	78 00	74 00
Christian																
Clark.........																
Clay..........	Flora	18	50 00	27 00				200	250 00	135 35	50	17 00	9 00	88	125 00	67 50
Clinton																
Coles.........	Charleston...	148	252 00	146 00	46	96 50	39 50	363	221 50	124 50	577	172 50	158 50	75	57 00	60 00
Cook.........																
Crawford	Robinson.....	22	24 00	13 00	10	28 00	6 85	122	59 00	34 00	412	176 00	62 50	83	54 00	22 00
Cumberland.	Toledo........	26	119 00	46 00	3	44 00	39 00	63	105 00	33 50	44	54 50	37 50	9	19 50	6 00
DeKalb.......	Sycamore	44	31 00	21 00	11	18 00	12 00	87	58 00	30 00	28	41 00	14 00	30	51 00	30 00
DeWitt.......	Clinton	28	46 00	17 50	13	97 00	14 00	61	54 00	34 00	160	85 00	68 00	5	24 00	5 00
DeWitt.......	*Farmer City*..	31	20 50	9 50	16	15 00	2 00	167	115 00	72 50	442	184 00	145 00	22	42 00	13 00
Douglas......	Tuscola.......	8	32 00					28	112 00		115	115 00		7	18 00	
DuPage	Wheaton	46	114 00	34 25	18			47	104 00	42 00	15	26 50	17 50			
Edgar........	Paris.........	170	153 00	131 00				88	32 00	29 00	959	421 50	421 50	93	142 00	93 00
Edwards.....	Albion	61	51 00	32 50	2	11 00	11 00	188	132 75	122 00	51	51 00	42 00	34	45 00	33 50
Effingham....	Effingham ...	32	33 90	27 00				150	95 50	95 50	167	75 00	75 80	12	100 00	70 00
Fayette	Vandalia	22	17 00	2 75	21	125 00	4 00	479	248 00	30 36	85	100 00	16 00			
Ford..........																
Franklin....	Benton	39	39 00	29 00	14	28 00	17 50	105	87 00	48 00	94	33 00	29 00	2		
Fulton	Canton	66	47 50	39 50	42	10 00	10 00	105	100 00	96 00	73	180 00	101 00	37	49 00	38 00
Fulton	Avon..........	100	58 50	53 50				278	78 75	66 00	577	115 00	84 75	154	69 50	53 00

Gallatin	Shawneet'wn	14	69 50	20 00	1	66 00	2 50	90	76 50	52 50	64	87 00	50 00	21	31 00	10 25
Greene	Carrollton	51	81 00	41 50	11	17 00	15 00	630	147 00	133 50	625	136 00	119 00	181	90 00	82 50
Grundy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hamilton	McLeansboro	94	161 00	70 00	24	78 00	19 50	155	122 00	86 25	193	86 50	64 25	35	51 50	21 00
Hancock	Carthage	132	78 00	58 30	50	53 00	40 00	1,230	282 25	248 25	198	112 75	99 25	333	144 00	123 00
Hancock	Warsaw	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hardin	Elizabetht'n.	2	18 00	3 50	6	40 25	5 00	103	23 80	25 00	64	28 75	25 50	25	15 00	15 00
Henderson	Biggsville	116	58 00	42 00	22	15 00	15 00	161	57 50	50 00	533	95 00	120 00	31	16 00	22 00
Henry	Cambridge	26	78 00	19 25	16	74 00	38 00	338	130 90	121 50	499	195 00	180 00	126	84 50	65 50
Iroquois	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jackson	Murphysboro	44	78 00	30 00	3	102 00	20 00	92	183 25	92 50	80	56 25	25 25	32	34 50	17 50
Jackson	Carbondale	96	169 50	100 50	...	...	...	130	177 00	167 75	126	115 50	94 50	...	...	...
Jasper	Newton	22	30 00	12 50	3	50 00	5 00	271	105 00	24 50	145	55 00	40 00	175	105 00	37 00
Jefferson	Mt. Vernon	63	60 50	47 50	11	89 00	55 00	294	243 00	117 85	38	65 00	44 50	71	55 50	40 50
Jersey	Jerseyville	171	298 00	112 00	18	136 00	57 00	269	374 00	339 00	766	320 00	256 00	460	294 00	272 00
JoDaviess	Galena	32	36 00	10 30	18	61 00	20 00	117	88 00	60 00	56	120 00	95 00	49	37 00	27 00
JoDaviess	Warren	25	88 50	23 50	...	...	...	98	32 00	21 15	107	32 00	23 85	36	28 00	17 10
Johnson	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kane	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kankakee	Kankakee	108	88 50	38 40	14	40 00	9 60	255	160 00	98 00	79	94 00	68 00	69	100 00	56 00
Kendall	Yorkville	32	50 00	13 75	8	9 50	2 00	122	58 25	27 40	63	39 00	25 25	43	66 25	28 25
Knox	Knoxville	150	100 00	50 00	200	70 00	70 00	350	125 00	100 00	1,100	200 00	180 00	300	25 00	25 00
Lake	Libertyville	25	36 00	19 00	...	...	...	359	102 50	79 25	66	65 75	22 10	26	17 00	17 00
Lake	Waukegan	181	303 00	70 00	47	47 50	47 50	387	169 00	165 00	231	74 25	66 75	...	...	...
LaSalle	Mendota	78	102 00	52 50	57	175 50	83 25	229	121 50	91 00	471	198 00	167 50	140	124 50	90 50
Lawrence	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lee	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Livingston	Fairbury	28	84 75	68 00	23	99 00	30 00	325	141 50	126 25	600	185 00	166 25	75	51 50	34 75
Logan	Lincoln	125	72 75	19 00	61	...	...	237	168 00	116 75	507	92 25	86 50	114	95 25	57 75
Logan	Atlanta	43	40 50	26 50	71	57 50	25 00	319	100 75	83 00	747	102 50	91 25	55	35 50	27 50
Macon	Decatur	78	77 00	33 00	16	46 00	25 30	121	92 50	35 90	162	58 50	21 75	3	5 00	2 75
Macoupin	Carlinville	29	92 00	36 00	17	209 00	117 00	101	88 00	86 00	300	80 00	80 00	40	60 00	30 00
Madison	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marion	Salem	24	46 00	16 50	11	25 00	8 00	78	52 25	29 00	48	30 00	14 00	8	15 00	4 00
Marshall	Wenona	24	90 00	12 00	30	99 00	45 00	416	210 25	173 75	821	377 25	309 25	144	152 00	110 50
Mason	Havana	7	21 00	2 50	2	18 00	5 00	83	139 50	40 50	2	15 00	1 00	7	15 00	1 50
Massac	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
McDonough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
McHenry	Woodstock	40	100 00	25 00	450	...	...	475	135 00	75 00	350	115 00	65 00	155	88 00	70 00
McHenry	Marengo	24	24 50	5 50	18	22 00	10 00	221	74 00	59 75	194	82 25	58 25	55	30 00	16 25
McLean	Bloomington	176	90 00	90 00	91	20 00	20 00	40	15 00	15 00	137	18 90	18 00	64	24 00	24 00
McLean	Bloomington	33	17 50	11 50	24	...	...	347	51 75	90 00	352	46 25	20 00	6	...	...
Menard	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mercer	Aledo	144	114 00	70 00	71	91 00	69 00	235	132 50	118 50	692	288 00	243 50	138	190 50	119 50
Monroe	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Montgomery	Hillsboro	28	41 00	17 00	21	90 00	25 00	140	89 00	60 00	166	89 00	76 00	43	42 00	20 00
Morgan	Jacksonville	107	130 50	94 55	13	54 50	30 50	231	148 50	128 50	597	231 00	206 00	56	54 75	32 00
Moultrie	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ogle	Rochelle	28	38 50	15 00	25	30 00	25 00	181	89 00	50 00	235	100 00	78 50	43	34 50	26 00

Exhibit Illinois Agricultural Fairs, 1884—Continued.

COUNTIES.	Location of Fair.	POULTRY.			MECHANIC ARTS.			FARM PRODUCTS.			HORTICULTURE AND FLORICULTURE.			FINE ARTS.		
		No. entries....	Amount premiums offered.	Amount premiums paid....	No. entries....	Amount premiums offered.	Amount premiums paid....	No. entries....	Amount premiums offered.	Amount premiums paid...	No. entries....	Amount premiums offered.	Amount premiums paid....	No. entries....	Amount premiums offered.	Amount premiums paid....
Peoria																
Perry	Pinckneyville	28	$54 50	$24 00	4	$30 00	$14 00	89	$78 50	$55 00	293	$103 00	$93 00	26	$34 00	$21 00
Piatt	Monticello	32	112 50	21 50	16	8 00	4 00	71	61 00	38 00	87	69 00	41 00	16	11 50	6 00
Pike	Pittsfield	57	81 90	31 50	1			57	89 00	23 00	26	56 00	4 00	30	89 00	31 75
Pope	Golconda	7	16 00	12 00	34	67 00	35 50	149	101 25	91 00	22	37 50	22 00	2	8 25	1 50
Pulaski																
Putnam																
Randolph	Sparta	30	26 50	14 50	48	116 00	99 00	152	68 50	57 75	194	40 00	40 00			
Richland																
Rock Island	Hillsdale	22	41 50	18 00	1			168	120 00	100 15	107	74 95	67 95	15	21 25	17 50
Rock Island	Port Byron	35	61 56	25 50	4	24 75	3 00	109	83 00	55 50	95	60 50	39 75	12	19 50	7 00
Saline	Harrisburg	24	55 25	32 00	8			49	84 00	37 00	51	65 00	45 50	11	9 00	7 00
Saline	El Dorado	36	57 00	23 50				201	115 00	104 25	347	135 00	116 50	46	40 00	27 50
Sangamon	Springfield	153	239 50	143 50				255	245 00	145 00	140	466 00	276 60	243	238 00	140 80
Schuyler	Rushville	39	61 50	24 00	70	174 75	80 00	191	112 50	79 75	280	127 50	105 00	36	31 50	13 00
Scott																
Shelby	Shelbyville	94	89 00	65 50				172	63 00	48 00	315	97 00	97 00	68	47 00	60 00
Stark	Toulon	93	124 00	51 00	18			737	164 50	155 00	1,287	86 50	64 00	186	92 75	81 75
Stark	Wyoming	56	101 50	40 50	43	46 00	16 00	328	169 50	140 50	597	145 50	121 00	70	121 00	48 50
St. Clair	Belleville	95	438 50	77 00	261	254 00	143 00	166	174 50	91 00	119	156 50	56 50	83	43 00	18 00
Stephenson																
Tazewell	Delavan	79	94 00	50 00	50	85 50	57 50	312	129 50	107 50	793	151 50	102 50	102	74 50	59 35
Tazewell	Mackinaw	18	15 75	2 50	10	6 25	6 25	162	33 25	19 25	134	30 50	18 50	6	7 50	5 25
Union	Anna	17	47 75	9 50	7	125 25	33 00	279	139 70	116 25	108	56 10	39 60	78	62 25	48 00
Union	Jonesboro	60	40 50	26 00	52	286 50	195 50	240	126 75	124 75	242	141 50	124 25	106	110 50	78 00
Vermilion	Hoopeston	89	93 00	73 00	12	45 00		280	96 00	76 00	306	91 00	82 98	3		
Vermilion	Catlin	31	37 00	15 00				131	61 50	33 00	331	71 00	64 00	4	11 00	4 50
Vermilion	Danville	142	292 50	191 00				195	158 00	158 00	28	40 50	40 50	62	40 00	40 00
Wabash																
Warren	Monmouth	118	58 50	42 00				266	120 50	105 00	756	151 00	136 00	74	96 75	67 75
Washington																
Wayne																

White.........	Carmi....	52	62 00	32 00	31	76 00	45 00	141	111 00	70 00	285	120 00	100 50	36	54 00	36 50
Whiteside....	Sterling	38	98 00	3 00	15	......	....	268	161 00	123 50	688	317 75	281 50	178	223 75	118 15
Whiteside....	Morrison ...	49	56 00	37 00	40	95 00	67 00	386	107 50	100 00	314	155 50	153 75	73	46 75	38 50
Whiteside.	Albany	33	22 00	18 00	2	5 00	....	177	66 75	58 25	240	59 00	56 00	115	55 50	46 75
Will	....	......	....	....	......	....	....	....	....	....	....	....	......	.....	....	....
Williamson..	Marion	49	69 00	36 25	9	73 75	16 00	24	50 00	36 50	215	100 50	93 50	......	....	....
Winnebago	Rockford.....	101	106 50	68 00	......	....	....	197	195 50	146 50	167	255 50	255 50	190	219 50	159 50
Woodford ...	El Paso	37	93 00	20 00	....	....	....	234	196 00	102 50	354	158 00	120 50	81	75 00	31 50
State Fair...	Chicago	497	857 00	534 00	65	....	....	426	1,198 00	625 00	508	1,530 00	1,248 00	271	478 00	430 00
Totals	....	5,918	$8,244 30	$4,073 30	2,692	$4,353 25	$2,157 50	19,838	$11,838 25	$8,234 66	20,937	$12,245 55	$9,573 43	6,736	$5,935 50	$4,073 60

Exhibit Illinois Agricultural Fairs, 1884—Continued

COUNTIES.	Location of Fair.	TEXTILE FABRICS.			EDUCATION AND NATURAL HISTORY.			SPEED RINGS.			AGRICULTURAL IMPLEMENTS.		
		Number of entries.....	Amount of premiums offered.....	Amount of premiums paid........	Number of entries.....	Amount of premiums offered.....	Amount of premiums paid........	Number of entries.....	Amount of premiums offered.....	Amount of premiums paid........	Number of entries....	Amount of premiums offered.....	Amount of premiums paid........
Adams	Camp Point	1,030	$299 00	$287 00	......	......	......	37	$430 00	$430 00	132	$115 00	$115 00
Alexander	......	......	......	......	......	......	......	......	......	......	......	......	......
Bond	......	......	......	......	......	......	......	......	......	......	......	......	......
Boone	Belvidere	322	170 25	143 00	......	......	......	15	650 00	408 00	50	83 00	37 50
Brown	Mt. Sterling	329	852 00	226 50	......	......	......	40	625 00	555 50	28	70 00	70 00
Bureau	Princeton	479	134 00	184 00	153	$200 00	$200 00	33	720 00	706 50	36	78 00	70 00
Calhoun	......	......	......	......	......	......	......	......	......	......	......	......	......
Carroll	Mt. Carroll	264	247 75	138 00	14	66 50	66 50	......	800 00	800 00	......	......	......
Cass	Virginia	194	134 00	85 40	......	......	......	24	475 80	332 50	24	47 00	34 00
Champaign	Champaign	222	135 50	120 00	......	......	......	24	1,015 00	1,005 00	......	......	......
Christian	......	......	......	......	......	......	......	......	......	......	......	......	......
Clark	......	......	......	......	......	......	......	......	......	......	......	......	......
Clay	Flora	150	103 00	55 00	......	......	......	30	400 00	251 03	......	......	......
Clinton	......	......	......	......	......	......	......	......	......	......	......	......	......
Coles	Charleston	273	116 00	124 00	......	......	......	21	370 00	280 00	......	......	......
Cook	......	......	......	......	......	......	......	......	......	......	......	......	......
Crawford	Robinson	224	108 00	58 00	11	20 00	6 50	......	......	......	9	......	......
Cumberland	Toledo	82	213 00	65 50	......	8 00	......	44	865 00	865 00	......	......	......
DeKalb	Sycamore	67	76 00	41 50	......	......	......	3	125 00	125 00	35	22 00	17 00
DeWitt	Clinton	89	137 00	61 50	......	......	......	21	815 00	570 00	......	......	......
DeWitt	Farmer City	160	67 25	42 25	5	8 00	4 00	20	855 00	720 00	......	......	......
Douglas	Tuscola	8	15 00	......	......	......	......	......	......	......	15	......	......
DuPage	Wheaton	59	95 00	30 00	......	100 00	......	......	195 00	95 00	8	24 00	9 00
Edgar	Paris	604	288 50	262 75	......	......	......	9	250 00	250 00	60	93 00	70 00
Edwards	Albion	227	176 85	131 40	......	......	......	24	300 00	300 00	51	119 75	108 00
Effingham	Effingham	208	80 00	75 00	3	21 00	7 00	14	250 00	125 00	5	......	......
Fayette	Vandalia	238	106 00	8 00	......	......	......	......	......	......	......	......	......
Ford	......	......	......	......	......	......	......	......	......	......	......	......	......
Franklin	Benton	41	35 50	19 00	......	......	......	41	725 00	725 00	......	......	......
Fulton	Canton	12	56 00	36 50	188	114 00	114 00	16	675 00	600 00	23	......	......
Fulton	Avon	525	161 75	94 75	28	30 50	6 00	15	555 00	375 00	10	79 50	49 50
Gallatin	Shawneetown	104	128 50	58 00	......	......	......	54	1,525 00	1,210 00	......	33 00	......
Greene	Gallatin	884	275 50	245 00	......	......	......	45	730 00	665 00	66	75 00	65 00
Grundy	......	......	......	......	......	......	......	......	......	......	......	......	......
Hamilton	McLeansboro	176	79 50	56 75	......	......	......	48	775 00	570 06	1	45 00	50
Hancock	Carthage	616	251 00	230 00	......	......	......	32	670 00	600 00	......	......	......

Hancock	Warsaw												
Hardin	Elizabethtown	56	28 35	30 50				23	461 00	352 00			
Henderson	Biggsville	179	50 00	70 00				32	619 00	470 00	15	15 00	15 00
Henry	Cambridge	253	135 50	125 50				36	1,200 00	1,200 00			
Iroquois													
Jackson	Murphysboro	120	87 00	33 00				38	655 00	655 00			
Jackson	Carbondale	*512	258 80	182 50				25	950 00	830 00	5	109 00	10 00
Jasper	Newton	187	112 00	38 45				27	495 00	205 00	22	50 00	
Jefferson	Mt. Vernon	320	179 50	136 09				45	845 00	815 00	5		
Jersey	Jerseyville	206	86 00	78 00				36	929 00	920 00	61	170 00	120 00
JoDaviess	Galena	250	128 00	97 00				10	580 00	550 00	60	52 00	45 00
JoDaviess	Warren	94	92 00	39 82				17	577 00	510 00	60	48 00	10 80
Johnson													
Kane													
Kankakee	Kankakee	184	130 00	88 00				24	1,000 00	757 50	19	48 00	13 60
Kendall	Yorkville	107	59 75	34 75	5	36 00	9 00	14	540 00	370 00	34	18 00	15 00
Knox	Knoxville	400	100 00	100 00	550	75 00	75 00	40	800 00	700 00	200	50 00	50 00
Lake	Libertyville	205	70 25	44 50	43	37 25	25 95	18	405 00	385 00	5	9 50	3 00
Lake	Waukegan	500	315 75	188 00	38	9 00	6 00	15	1,050 00	535 00			
LaSalle	Mendota	500	258 00	198 50				36	730 00	435 00			
Lawrence													
Lee													
Livingston	Fairbury	574	178 25	121 25	15	23 00	18 00	25	605 00	545 00	250	115 50	69 00
Logan	Lincoln	297	198 00	93 25				51	2,330 00	2,330 00			
Logan	Atlanta	251	56 25	51 75	410	32 50	31 00	21	250 00				
Macon	Decatur	199	147 25	72 45	10	15 00	11 50	32	580 00	311 50	3	25 00	13 75
Macoupin	Carlinville	650	225 00	175 00	10	42 00	18 00	43	775 00	735 00			
Madison													
Marion	Salem	301	65 00	30 00				38	680 00	680 00	7	30 00	10 50
Marshall	Wenona	550	389 25	317 75				30	965 00	855 00	30	68 00	
Mason	Havana	55	75 50	21 00				12	400 00	243 00			
Massac													
McDonough													
McHenry	Woodstock	400	150 00	105 00	100	75 00	25 00	55	1,000 00	615 25	500		
McHenry	Marengo	84	49 25	31 00				43	463 00	332 00	34	19 00	8 00
McLean	Bloomington	58			21			63	2,200 00	1,750 00	77	5 00	5 00
McLean	Bloomington	153	24 25	39 75							43		
Menard													
Mercer	Aledo	296	211 75	154 50				21	575 00	575 00			
Monroe													
Montgomery	Hillsboro	147	101 00	44 00	7	9 00	9 00	8	375 00	92 00	13	50 00	11 00
Morgan	Jacksonville	677	408 00	382 50	10	37 50	8 00	60	2,500 00	1,940 00	65	262 00	205 50
Moultrie													
Ogle	Rochelle	215	114 50	65 50	6	18 00	8 00				45	112 50	32 00
Peoria													
Perry	Pinckneyville	229	123 00	79 00				59	1,175 00	1,155 00			
Piatt	Monticello	103	98 00	41 75	3	110 00	106 00	44	1,290 00	400 00			
Pike	Pittsfield	210	260 00	130 00				51	600 00	297 50			
Pope	Golconda	104	77 25	55 25				23	85 00	85 00			
Pulaski													
Putnam													
Randolph	Sparta	229	165 00	130 00							14	110 00	110 00

Exhibit Illinois Agricultural Fairs, 1894—Continued.

COUNTIES.	Location of Fair.	TEXTILE FABRICS.			EDUCATION AND NATURAL HISTORY.			SPEED RINGS.			AGRICULTURAL IMPLEMENTS.		
		Number of entries.....	Amount of premiums offered	Amount of premiums paid........	Number of entries.....	Amount of premiums offered	Amount of premiums paid........	Number of entries.....	Amount of premiums offered	Amount of premiums paid........	Number of entries.....	Amount of premiums offered.....	Amount of premiums paid........
Richland													
Rock Island	Hillsdale	83	$26 00	$25 40							30		
Rock Island	Port Byron	52	24 00	15 50				26	$265 00	$265 00	7	$10 50	$8 00
Saline	Harrisburg	88	28 00	22 00				47	415 00	355 00			
Saline	El Dorado	188	114 00	88 50				35	900 00	745 00	42	127 50	81 50
Sangamon	Springfield	526	389 00	231 40							100	25 00	15 00
Schuyler	Rushville	255	156 00	136 50				30	645 00	570 00			
Scott													
Shelby	Shelbyville	141	160 00	160 00							5	71 00	16 00
Stark	Toulon	593	177 00	172 80	52	$62 00	$62 00	11	190 00	170 00	34	10 00	10 00
Stark	Wyoming	367	315 25	154 00	23	48 00	37 50	22	600 00	376 00	15		
St. Clair	Belleville	411	235 00	168 00	253	110 00	106 00	47	1,305 00	935 00	63		
Stephenson													
Tazewell	Delavan	1,113	216 10	180 50				31	530 00	347 00	57	45 00	36 50
Tazewell	Mackinaw	133	43 25	17 00	15	45 00	41 25				68	25 00	25 00
Union	Anna	349	151 25	152 75				52	1,291 50	682 50	7	87 50	45 00
Union	Jonesboro	428	182 00	158 75									
Vermilion	Hoopeston	510	260 00	260 00				35	713 00	513 00	16	29 00	19 00
Vermilion	Catlin	114	46 50	44 75					595 00				
Vermilion	Danville	51	76 25	76 25				12	1,075 00	1,000 00	57	127 00	111 00
Wabash													
Warren	Monmouth	391	151 50	133 75				40	1,110 00	1,110 00	25		
Washington													
Wayne													
White	Carmi	160	155 00	109 50				55	1,260 00	1,260 00	23	58 00	27 00
Whiteside	Sterling	333	137 75	101 00	27	113 50	55 00	13	875 00	765 00			
Whiteside	Morrison	286	156 75	112 75	59	40 50	34 50	12	495 00	275 00	3	16 00	16 00
Whiteside	Albany							25	300 00	300 00			
Will													
Williamson	Marion	*128	108 50	57 75				44	673 00	556 00			
Winnebago	Rockford	251	190 00	147 50	43	100 00	98 50		880 00	855 00			
Woodford	El Paso	313	162 00	102 90	7	24 00	22 00	24	500 00	500 00	82	75 00	42 00
State Fair	Chicago	1,047	753 00	712 00	591	1,059 50	800 50	36	5,700 00	4,597 50	572		
Fat-Stock Show	Chicago												
Totals		25,753	$13,613 35	$10,039 47	2,700	$2,689 75	$2,011 70	2,322	$63,788 30	$51,401 28	3,326	$2,957 25	$1,844 65

* Includes Fine Arts.

Exhibit Illinois Agricultural Fairs, 1884—Continued.

COUNTIES.	Location of Fair.	President.	Secretary.	MISCELLANEOUS EXHIBIT.			TOTALS.		
				No. entries	Amount premiums offered.	Amount premiums paid.	No. entries	Amount premiums offered.	Amount premiums paid.
Adams	Camp Point	E. A. Rogers	Fred Boger	131	$95 00	$90 00	4,060	$4,094 75	$3,546 50
Alexander									
Bond									
Boone	Belvidere	George Reed	A. E. Jenner	21			961	2,048 75	1,061 00
Brown	Mt. Sterling	C. M. Dunlap	John J. McDannold				1,484	2,79[illegible] 50	2,217 50
Bureau	Princeton	John Crassman	M. C. Clark				1,968	4,014 50	3,259 25
Calhoun									
Carroll	Mt. Carroll	E. Bailey	J. L. Reynolds				868	3,013 50	1,870 75
Cass	Virginia	R. W. Raybourn	Reuben Lancaster				985	2,329 20	1,433 20
Champaign	Champaign	H. H. Harris	H. J. Dunlap				1,462	2,863 00	2,495 00
Christian									
Clark									
Clay	Flora	S. Rider	I. H. Smith				634	1,788 00	1,000 00
Clinton									
Coles	Charleston	William Millar	W. E. Hampton				1,954	3,487 50	2,486 25
Cook									
Crawford	Robinson	P. P. Cornett	S. R. Delzell	9	18 00	6 00	1,118	1,581 00	794 85
Cumberland	Toledo	C. G. Jones	Wm. L. Bruster			90 40	407	2,704 00	1,738 90
DeKalb	Sycamore	Hiram Holcomb	B. I. Wyman	40	150 00	108 00	571	1,594 00	819 50
DeWitt	Clinton	Z. D. Cantrall	W. B. Rundle				820	2,375 00	1,457 50
DeWitt	Farmer City	V. S. Lindsey	W. W. Alder			27 65	1,416	2,825 75	2,2[illegible]0 90
Douglas	Tuscola	Isaac Casler	A. M. Woody				233	1,192 00	
DuPage	Wheaton	E. H. Gary	Wm. H. Johnson				269	1,559 50	453 25
Edgar	Paris	W. O. Wilson	H. B. Adams				2,494	3,234 00	3,0[illegible]9 25
Edwards	Albion	John Curtes	L. L. Emerson	62	148 00	126 00	915	1,932 35	1,616 40
Effingham	Effingham	Wm. Donaldson	C. A. Van Allen				737	1,178 40	800 50
Fayette	Vandalia	O. E. Levett	Chas. L. Dinges, Jr	41			1,201	1,546 50	183 26
Ford									
Franklin	Benton	Wm. R. Webb	Wm. F. Spiller	4	4 00	4 00	557	2,043 00	1,580 00
Fulton	Canton	John Prickett	John R. Gardiner	37		100 00	850	2,094 50	1,772 00
Fulton	Avon	D. H. Gorham	S. L. Tompkins	148	35 25	17 19	2,434	2,638 75	1,275 69
Gallatin	Shawneetown	M. M. Pool	John L. Robinson				646	3,782 50	2,633 25
Greene	Carrollton	E. V. Baldwin	N. J. Andrews	2	75 00	75 00	3,017	3,029 50	2,341 50
Grundy									
Hamilton	McLeansboro	John H. Wilson	T. B. Steele		10 00		1,006	2,832 25	1,514 25
Hancock	Carthage	H. W. Bennett	O. F. Berry	60			3,598	4,248 00	3,431 80
Hancock	Warsaw								
Hardin	Elizabethtown	J. B. Miller	L. F. Twitchell	11	17 00	14 00	393	1,021 65	795 00

Exhibit Illinois Agricultural Fairs, 1884—Continued.

COUNTIES.	Location of Fair.	President.	Secretary.	MISCELLANEOUS EXHIBIT.			TOTALS.		
				No. entries	Amount premiums offered.	Amount premiums paid.	No. entries	Amount premiums offered.	Amount premiums paid.
Henderson	Biggsville	Thomas G. Richey	R. A. McKinley	29		$5 00	1,406	$2,090 00	$1,678 00
Henry	Cambridge	N. C. Gilbert	R. H. Hinman				1,452	3,312 00	2,718 75
Iroquois									
Jackson	Murphysboro	J. B. Mayhan	George Kennedy, Jr.	41			543	2,249 00	1,151 75
Jackson	Carbondale	J. M. Scurlock	Samuel T. Brush	34		46 00	1,145	3,976 30	2,374 25
Jasper	Newton	John Mason	W. E. Barrett				1,044	2,210 00	923 45
Jefferson	Mt. Vernon	Jesse A. Dees	John S. Bogan				1,167	2,709 50	2,163 35
Jersey	Jerseyville	D. E. Beatty	Morris R. Locke	35			2,664	4,125 00	3,579 00
JoDaviess	Galena	George S. Avery	Frank Bostwick	38	$10 00	10 00	825	1,681 00	1,323 55
JoDaviess	Warren	Robert Hawley	Joseph Hicks	30	45 50		598	1,373 50	949 22
Johnson									
Kane									
Kankakee	Kankakee	Peleg Winslow	M. Enyart	60	50 00	24 40	1,124	3,074 50	1,571 10
Kendall	Yorkville	Nathan Loucks	Charles F. Hobbs				657	1,716 75	903 40
Knox	Knoxville	D. M. Eiken	O. L. Campbell				3,812	2,956 00	2,500 00
Lake	Libertyville	E. W. Parkhurst	W. T. Biggs	82	34 25	95 30	1,072	1,658 00	997 60
Lake	Waukegan	O. S. Lincoln	H. E. Partridge			10 00	1,632	3,699 00	1,773 75
LaSalle	Mondota	William Truman	Charles T. Madden	96	33 50	32 00	1,920	3,622 00	2,354 25
Lawrence									
Lee									
Livingston	Fairbury	R. C. Straight	Thos. S. O. McDowell	40	16 50	16 50	2,402	4,354 00	2,647 00
Logan	Lincoln	A. B. Nicholson	F. H. Stokes				2,101	4,671 75	3,936 75
Logan	Atlanta	Ed. Stubblefield	J. P. Hieronymus	90	79 25	45 50	2,537	2,400 75	1,517 50
Macon	Decatur	J. G. Willard	J. C. Hostetler	6			998	2,773 25	1,201 40
Macoupin	Carlinville	Joseph Bird	George J. Castle	50	206 00	179 50	1,518	2,672 00	2,181 50
Madison									
Marion	Salem	A. Coffin	L. O. Vogt	3	10 00	1 00	735	2,008 25	1,490 50
Marshall	Wenona	S. S. Burgess	George G. McAdam	4	175 00	175 00	2,738	4,188 75	3,356 25
Mason	Havana	I. F. Kelsey	S. A. Murdock	5		15 00	311	1,636 00	474 00
Massac									
McDonough									
McHenry	Woodstock	T. McD. Richards	A. S. Wright				2,914	3,033 00	1,614 75
McHenry	Marengo	L. W. Sheldon	R. M. Patrick	40		20 67	1,028	1,560 00	1,037 92
McLean	Bloomington	O. L. Cheney	W. A. Jones	13			953	4,323 00	2,912 00
McLean	Bloomington	Sylvester Peasley	A. L. Viney				1,155	552 25	309 75
Menard									
Mercer	Aledo	A. P. Petrie	J. F. Henderson	71		281 41	2,071	3,506 75	2,859 41
Monroe									
Montgomery	Hillsboro	James M. Truitt	W. K. Jackson	1	40 00	5 00	795	1,762 75	853 50

Morgan	Jacksonville	W. C. Carter	J. M. Dunlap	43	185 00	185 00	2,338	6,777 00	4,977 30
Moultrie									
Ogle	Rochelle	J. A. Countryman	G. W. Clark	11		397 50	1,228	1,978 50	1,718 50
Peoria									
Perry	Pinckneyville	O. P. Baird	E. H. Lemen	14			885	2,449 50	2,006 00
Piatt	Monticello	Jesse W. Warner	Caleb A. Tatman	10	25 00	21 00	626	2,876 00	1,475 75
Pike	Pittsfield	J. M. Bush	E. F. Binns,			140 00	816	2,679 00	911 25
Pope	Golconda	William King	Thos. H. Sheridan	72	42 95	17 95	571	974 70	818 20
Pulaski									
Putnam									
Randolph	Sparta	J. H. Dickey	J. C. Bratney	188	50 00	35 00	1,063	1,846 50	1,293 75
Richland									
Rock Island	Hillsdale	N. B. Joslin	N. J. Blackburn				517	855 45	475 00
Rock Island	Port Byron	A. F. Hollister	A. Seddoris	15	40 00	17 45	495	1,145 25	661 95
Saline	Harrisburg	W. E. Burnett	F. M. Pickett				583	1,523 25	1,106 50
Saline	Eldorado	John Yost	George B. Parsons	2	5 00	2 50	1,098	2,882 50	1,980 25
Sangamon	Springfield	George Pickrell	James A. Winston				1,825	5,039 50	2,917 50
Schuyler	Rushville	Edwin M. Anderson	John S. Bagby				1,214	2,596 75	1,832 25
Scott									
Shelby	Shelbyville	John A. Tackett	George A. Roberts				1,107	1,659 00	1,487 50
Stark	Toulon	Cyrus Bocock	James Nowlen				3,353	2,604 75	1,826 75
Stark	Wyoming	Richard Davidson	A. G. Hammond	28	78 50	68 50	1,773	3,100 25	1,809 50
St. Clair	Belleville	Jos. Reichert	Don Turner	422	285 50	121 00	2,389	6,071 00	3,241 50
Stephenson									
Tazewell	Delavan	Ira B. Hall	D. B. Pittsford	407	118 00	86 00	3,433	2,882 60	2,003 45
Tazewell	Mackinaw	D. W. Puterbaugh	R. V. Howe	26	14 50	12 00	1,014	690 20	390 45
Union	Anna	M. V. Ussery	H. F. Bussey	102		28 15	1,150	3,596 80	1,615 25
Union	Jonesboro	Florence W. Green	Joseph H. Samson	220	42 00	77 70	1,615	1,909 75	1,515 95
Vermilion	Hoopeston	James A. Cunningham	Dale Wallace	25	23 00	23 00	1,696	3,637 00	2,655 98
Vermilion	Catlin	G. W. Wolfe	S. A. McGregor				865	2,304 00	1,031 25
Vermilion	Danville	Wm. J. Moore	Leslie Paris		200 00	280 00	858	4,109 75	3,842 25
Wabash									
Warren	Monmouth	J. T. Reichard	George C. Rankin	24			2,099	3,480 75	2,998 50
Washington									
Wayne									
White	Carmi	Elois Stinnett	Frank E. Pomeroy				1,020	3,267 00	2 641 00
Whiteside	Sterling	Moses Dillon	H. A. Aumert	11	543 50	526 00	1,961	4,034 25	2,917 65
Whiteside	Morrison	R. E. Logan	Ed. J. Congar	12		58 00	1,485	1,928 00	1,471 50
Whiteside	Albany	E. H. Nevitt	J. F. Happer				761	1,357 25	900 00
Will									
Williamson	Marion	A. T. Benson	John W. Burton				623	2,030 75	1,326 50
Winnebago	Rockford	Lawrence McDonald	F. H. Kimball	58		12 50	1,446	3,312 00	2,644 00
Woodford	El Paso	Ed. Hodgson	Walter Bennett	89	175 00	146 88	1,617	2,605 00	1,663 78
State Fair	Chicago	John Landrigan	S. D. Fisher	8		*607 62	5,789	24,551 50	20,307 62
Fat-Stock Show	Chicago	John Landrigan	S. D. Fisher			3,763 00	679	7,205 00	8,683 00
Totals				3,121	$5,080 20	$8,247 27	130,426	$269,468 90	$190,368 48

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* Specials and 1883 premiums.

FINANCIAL EXHIBIT ILLINOIS AGRICULTURAL FAIRS, 1884.

COUNTIES.	Location of Fair.	Amount in treasury last report..........	Amount received gate and entrance fees..........	Amount received booth rents and permits	Amount received sale shares stock	Amount received State appropriation	Amount received other sources.......	Amount paid in premiums.	Amount paid real estate, buildings, etc.	Amount paid current expenses not premiums	Amount paid on previous indebtedness.	Amount remaining in treasury......	Amount deficit current year.
Adams..........	Camp Point.......	$1,443 61	$4,585 80	$892 10	....	$100 00	$438 50	$3,546 50	$509 37	$1,738 36	....	$1,665 78	....
Alexander	....	....	....	....	....	....	....	....	....	....	....	....	....
Bond	....	....	....	....	....	....	....	....	....	....	....	....	....
Boone	Belvidere	7 61	2,015 00	152 00	....	100 00	....	1,061 00	51 12	923 62	....	238 87	....
Brown	Mt. Sterling.......	1,650 12	3,418 41	461 60	$362 56	100 00	....	2,217 50	1,307 66	1,254 90	$1,210 00	32 63	....
Bureau..........	Princeton.........	138 16	4,768 03	414 30	....	100 00	604 84	3,259 25	916 45	1,605 56	239 80	4 27	....
Calhoun	....	....	....	....	....	....	....	....	....	....	....	....	....
Carroll	Mt. Carroll.........	....	2 530 87	400 00	....	....	....	1.870 75	331 23	638 88	90 00	....	....
Cass.	Virginia.	147 16	1.810 40	164 90	....	....	....	1,433 20	....	686 05	....	3 21	....
Champaign.....	Champaign	165 06	3,225 75	524 25	....	100 00	269 45	2,495 00	421 44	876 06	400 00	92 01	....
Christian	....	....	....	....	....	....	....	....	....	....	....	....	....
Clark..........	....	....	....	....	....	....	....	....	....	....	....	....	....
Clay	Flora	12 86	1,100 00	100 00	....	100 00	....	1,000 00	25 00	287 86	....	....	....
Clinton	....	....	....	....	....	....	....	....	....	....	....	....	....
Coles	Charleston........	54 77	3,483 95	535 00	....	100 00	1,290 79	2,486 25	1,630 58	801 12	946 00	50 56	450 00
Cook	....	....	....	....	....	....	....	....	....	....	....	....	....
Crawford	Robinson	....	1,111 90	181 48	....	100 00	....	794 85	253 84	380 86	....	....	36 17
Cumberland ..	Toledo	....	2.037 35	104 00	80 00	100 00	1,318 92	1,738 90	1,068 73	593 60	182 69	56 35	....
DeKalb	Sycamore..........	21 20	1,708 80	259 00	....	100 00	65 00	819 50	275 00	780 50	....	270 00	....
DeWitt..........	Clinton..	10 08	1.671 55	882 90	75 00	100 00	....	1.457 50	201 00	1,041 07	....	37 95	....
DeWitt..	Farmer City	....	3,095 50	429 25	230 00	100 00	588 00	2.200 90	366 60	1,446 30	164 53	262 42	....
Douglas.	Tuscola	1 16	449 90	49 10	....	100 00	....	....	136 00	359 94	100 00	4 22	....
DuPage.........	Wheaton..........	21 18	319 00	27 00	....	100 00	273 54	453 25	50 37	73 28	126 66	37 16	....
Edgar	Paris	1,500 00	3,259 95	559 18	....	100 00	596 91	3,029 25	1,612 22	....	....	1,374 57	....
Edwards	Albion.	424 50	1,737 25	250 00	....	100 00	....	1,616 40	131 40	290 02	....	373 93	....
Effingham	Effingham	....	381 80	73 95	....	100 00	631 96	800 50	98 64	137 79	253 78	....	100 00
Fayette	Vandalia.........	62 98	5 0 55	121 77	....	100 00	....	183 26	....	611 79	....	23 93	63 68
Ford.	....	....	....	....	....	....	....	....	....	....	....	....	....
Franklin	Benton...........	163 93	2,070 55	379 45	....	100 00	130 00	1.580 00	2,680 00	633 50	....	....	2,049 57
Fulton..........	Canton	....	2,079 60	251 00	....	....	900 00	1.772 90	521 00	691 34	121 50	124 76	....
Fulton	Avon	....	1.886 60	351 50	7 00	100 00	363 10	1,275 69	....	1,114 67	12 79	305 05	....
Gallatin.........	Shawneetown....	....	2,680 85	521 00	....	100 00	....	2,633 25	1,511 30	593 10	....	....	1,435 80
Greene..........	Carrollton	....	2,689 00	316 50	....	100 00	661 80	2,341 50	....	2,010 06	44 60	....	628 86
Grundy	....	....	....	....	....	....	....	....	....	....	....	....	....
Hamilton.......	McLeansboro	368 70	1,677 35	1,218 00	....	....	50 0	1.514 25	500 00	697 59	....	692 30	....
Hancock.... ..	Carthage	1,221 60	5,650 75	618 15	115 00	100 00	808 45	3,431 80	2,911 17	1,729 07	....	441 91	....
Hancock	Warsaw.	....	....	....	....	....	....	....	....	....	....	....	....
Hardin	Elizabethtown. ..	105 55	830 15	174 85	....	100 00	....	795 00	496 65	313 90	....	....	395 00
Henderson	Biggsville	1,262 50	275 65	....	....	100 00	412 75	1,678 00	264 94	302 46	107 77	....	302 27

Henry	Cambridge	281 77	2,621 02	480 69	25 00	100 00	216 40	2,718 75	300 00	541 43	139 25	25 45	
Iroquois													
Jackson	Murphysboro		862 30	210 00		100 00	97 00	1,151 75	166 20	217 70			306 35
Jackson	Carbondale	409 86	2,579 84	278 95		100 00	352 65	2,373 75	501 81	819 21		23 53	
Jasper	Newton	326 64	1,728 05	180 00		100 00	55 00	923 45	106 59	394 00		965 65	
Jefferson	Mt. Vernon		2,486 80	666 25				2,163 35	456 60	478 99	280 80		226 69
Jersey	Jerseyville		4,558 05	754 50		100 00	1,184 90	3,579 00		2,633 66	384 79		
JoDaviess	Galena		1,876 66	525 50		100 00	301 85	1,323 55	189 14	944 27	357 05		
JoDaviess	Warren	15 38	966 40	418 30		100 00	19 24	949 22		327 52		242 58	
Johnson													
Kane													
Kankakee	Kankakee	57 65	2,081 57	335 00		100 00	88 00	1,571 10	531 26	478 07	6 00	75 79	
Kendall	Yorkville		1,960 27	135 00		100 00		903 40	105 00	881 62		305 25	
Knox	Knoxville		2,500 00	350 00	244 00	100 00	120 00	2,500 00	100 00	212 57	164 00	107 43	
Lake	Libertyville	24 21	1,052 20	427 75		100 00	67 83	997 60	285 30	372 42	189 25		172 67
Lake	Waukegan		2,309 85	684 93		100 00	749 93	1,773 75		1,448 09	416 40	206 47	
LaSalle	Mendota	218 98	5,170 35	362 75	7 00	100 00	224 75	2,354 25		2,419 82	534 89	774 87	
Lawrence													
Lee													
Livingston	Fairbury	36 72	2,884 46	310 00		100 00	606 35	2,647 00		933 66		356 87	
Logan	Lincoln		3,609 92	768 00	7,150 00	100 00	851 30	3,936 75	737 68	1,450 43	8,990 92		2,636 56
Logan	Atlanta	840 30	2,640 00	392 00		100 00	550 25	1,517 50	676 16	984 31		1,364 58	
Macon	Decatur	827 74	1,607 75	260 45		100 00	318 00	1,201 40	340 09	678 66	377 98	15 81	
Macoupin	Carlinville	10 00	1,730 00	542 50		100 00	107 00	2,181 50		838 00			530 00
Madison													
Marion	Salem	11 84	1,432 65	232 00		100 00	41 50	1,490 50	432 00	132 00	196 59		433 10
Marshall	Wenona	94 02	4,936 37		186 53	100 00	269 75	3,356 25	80 00	2,208 44			58 02
Mason	Havana		800 00	125 00			169 80	474 00	591 27			29 53	
Massac													
McDonough													
McHenry	Woodstock	6 16	3,398 50	614 75		100 00	828 75	1,614 75	1,643 61	1,671 90		17 90	
McHenry	Marengo	251 72	1,634 19	158 15	40 00	100 00		1,067 92	22 65	978 00		145 49	
McLean	Bloomington		1,617 65	516 20			731 45	2,912 00	1,435 20	864 15	200 00		2,546 05
McLean	Bloomington		760 63	114 90	230 00	100 00	3 10	309 75	140 06	362 27	396 61		
Menard													
Mercer	Aledo	212 60	3,067 50	1,058 21		100 00	949 25	2,859 41	785 45	926 85	695 66	120 19	
Monroe													
Montgomery	Hillsboro		1,240 00	93 00		100 00	114 77	873 50	9 72	628 73	25 54	30 28	
Morgan	Jacksonville	37 28	3,472 75	701 00		100 00	95 00	4,977 30	288 21	1,483 37			2,342 85
Moultrie													
Ogle	Rochelle	254 20	1,503 07	566 00		100 00	173 50	1,718 50	663 62			214 65	
Peoria													
Perry	Pinckneyville	372 06	1,840 25	628 70		100 00	952 60	2,006 00	250 00	1,388 61		249 00	
Piatt	Monticello	2,411 18	3,251 59	594 75				1,475 75	1,973 27	963 50		1,845 00	
Pike	Pittsfield		1,560 83	436 25		100 00	358 65	911 25	176 64	835 33	483 30	49 21	
Pope	Golconda	718 10	1,107 65	200 00		100 00	154 20	818 20	143 00	309 05	605 30	404 40	
Pulaski													
Putnam													
Randolph	Sparta	4 05	1,216 25	213 00		100 00	444 30	1,293 75		445 88	235 18	2 79	
Richland													
Rock Island	Hillsdale	42 50	630 52	128 15		100 00	78 15	475 00	63 00	362 48	77 95	89	
Rock Island	Port Byron	193 07	744 10	185 20		100 00	96 40	661 95		460 95		195 87	

Financial Exhibit Illinois Agricultural Fairs, 1884—Continued.

COUNTIES.	Location of Fair.	Amount in treasury last report	Amount received gate and entrance fees	Amount received booth rents and permits	Amount received sale shares stock	Amount received State appropriation	Amount received other sources	Amount paid in premiums.	Amount paid real estate, buildings, etc.	Amount paid current expenses not premiums	Amount paid on previous indebtedness.	Amount remaining in treasury	Amount deficit current year.
Saline	Harrisburg	$1,390 64	$648 60	$334 15		$100 00	$621 66	$1,106 50		$465 30	$128 00	$1,395 25	
Saline	ElDorado		2,120 17	460 50	$70 00		203 00	1,980 25	$73 75	1,177 00	81 40		$458 73
Sangamon	Springfield	61 44	*7,086 53					2,917 50		1,368 22	2,862 25		
Schuyler	Rushville		2,646 60	315 60		100 00		1,832 25	704 88	417 78	355 54		248 25
Scott													
Shelby	Shelbyville	869 54	2,442 02	221 35		100 00		1,487 50	1,400 00	443 81		301 60	
Stark	Toulon	27 71	2,284 15	1,003 15		100 00	1,400 00	1,826 75		1,363 42	112 00	1,512 84	
Stark	Wyoming	90 00	2,950 73	544 65		100 00	135 67	1,869 50		1,606 84	153 92	190 79	
St. Clair	Belleville	1,729 25	2,675 80	1,579 00	1,200 00	100 00	615 35	3,241 50		4,592 42		65 48	
Stephenson													
Tazewell	Delavan		3,245 70	613 90	10 00	100 00	127 34	2,003 45	331 66	1,091 57	670 26		
Tazewell	Mackinaw		911 96	157 05	30 95	100 00	221 07	390 45	734 71	319 63	487 67	18 57	530 00
Union	Anna	383 29	1,723 60	555 20		100 00	91 64	1,615 25	627 31	761 89	439 25	7 03	600 00
Union	Jonesboro	327 60	1,733 45	391 50		100 00	36 81	1,515 95	625 31	415 38		32 72	
Vermilion	Hoopeston	519 43	3,145 76	841 50		100 00	44 00	2,655 98	1,457 19	717 22		20 30	200 00
Vermillion	Catlin	779 99	1,387 75	249 05			320 11	1,031 25		1,092 30		613 35	
Vermilion	Danville		3,692 15	425 50	234 00		57 90	3,842 25	201 50	526 40	79 80		240 40
Wabash													
Warren	Monmouth	18 11	3,822 50	417 50		100 00	24 06	2,998 50	150 00	1,019 67	200 00	14 00	
Washington													
Wayne													
White	Carmi	280 66	3,214 25	1,225 40			488 05	2,641 00		1,686 83	800 00	80 53	
Whiteside	Sterling	1,218 83	4,744 93	441 10	180 00	100 00	625 40	2,917 65		5,523 91			1,131 33
Whiteside	Morrison		2,534 05	328 25		100 00	334 40	1,471 50	250 00	1,092 02	753 37		270 19
Whiteside	Albany		750 00	183 75				900 00	250 00	452 82			669 07
Will													
Williamson	Marion	4 90	1,453 70	402 60		100 00	102 50	1,326 50		645 64		91 56	
Winnebago	Rockford	147 89	6,238 95	497 00		100 00	172 08	2,644 00	617 72	2,616 44		1,277 76	
Woodford	ElPaso	53 19	22,369 60	182 15		100 00	140 95	1,663 78	300 00	533 05		319 06	
State Fair.	Chicago	23,743 70	3,844 00	7,145 00	1,899 25	4,000 00	90 00	20,307 62		16 468 39	139 39	23,806 55	
Fat Stock Show	Chicago		7,789 95			1,000 00	8,343 00	8,683 00		8,589 34			139 39
Totals		$47,586 93	$237,799 15	$43,565 91	$12,376 29	$12,500 00	$34,973 62	$190,368 48	$39,201 30	$108,761 93	$26,020 43	$13,650 76	$19,201 00

*Includes all receipts.

DEBT STATEMENT, ILLINOIS AGRICULTURAL FAIRS, 1884.

COUNTIES.	Location of Fair.	Amount of deficit last report	Amount of interest on debt	Amount of deficit for 1884	Amount paid on debt	Amount of present indebtedness
Adams	Camp Point					
Alexander						
Bond						
Boone	Belvidere					
Brown	Mt. Sterling	$1,100 00	$110 00		$1,210 00	
Bureau	Princeton	3,337 45	239 80		239 80	$3,337 45
Calhoun						
Carroll	Mt. Carroll	150 00	90 00		90 00	150 00
Cass	Virginia					
Champaign	Champaign	4,900 00			400 00	4,500 00
Christian						
Clark						
Clay	Flora	2,526 95	210 00			2,736 95
Clinton						
Coles	Charleston	4,350 00	296 00	$450 00	946 00	4,150 00
Cook						
Crawford	Robinson			36 17		36 17
Cumberland	Toledo	182 69			182 69	
DeKalb	Sycamore					
DeWitt	Clinton	750 00				750 00
DeWitt	Farmer City	161 13	3 40		164 43	
Douglas	Tuscola	800 00	48 00		100 00	748 00
DuPage	Wheaton	350 00	26 66		126 66	250 00
Edgar	Paris					
Edwards						
Effingham	Effingham	275 00	36 79	41 99	253 78	100 00
Fayette	Vandalia	496 60	39 72	63 68		600 00
Ford						
Franklin	Benton			2,049 57		2,049 57
Fulton	Canton	116 75	4 75		121 50	
Fulton	Avon	612 79	36 85		12 79	636 85
Gallatin	Shawneetown	1,078 15	86 05	1,435 80		2,600 00
Greene	Carrollton	403 76	44 60	628 86	44 60	1,032 62
Grundy						
Hamilton	McLeansboro					
Hancock	Carthage					
Hancock	Warsaw					
Hardin	Elizabethtown			395 00		395 00
Henderson	Biggsville	393 39		302 27	107 77	587 89
Henry	Cambridge	1,639 25	105 00		139 25	1,605 00
Iroquois						
Jackson	Murphysboro	1,886 78	150 88	306 35		2,344 00
Jackson	Carbondale					
Jasper	Newton					
Jefferson	Mt. Vernon	260 90	20 80	226 69	280 80	227 59
Jersey	Jerseyville	1,054 94	71 52		384 79	741 67
JoDaviess	Galena	2,350 00	168 50		357 05	2,161 45
JoDaviess	Warren					
Johnson						
Kane						
Kankakee	Kankakee	6 00			6 00	
Kendall	Yorkville					
Knox	Knoxville	104 00	60 00		164 00	
Lake	Libertyville	1,719 53	105 73	172 67	189 25	1,808 68
Lake	Waukegan	3,056 40	360 00		416 40	3,000 00
LaSalle	Mendota	500 00	34 89		534 89	
Lawrence						
Lee						
Livingston	Fairbury	1,600 00	128 00			1,728 00
Logan	Lincoln	8,990 92		2,636 56	8,990 92	2,636 56
Logan	Atlanta					

Debt Statement—Continued.

COUNTIES.	Location of Fair.	Amount of deficit last report....	Amount of interest on debt....	Amount of deficit for 1884..........	Amount paid on debt..........	Amount of present indebtedness..........
Macon	Decatur	$450 00	$77 98		$377 98	$150 00
Macoupin	Carlinville	240 00	30 00	$530 00		800 00
Madison						
Marion	Salem	196 59		433 10	196 59	433 10
Marshall	Wenona	3,177 48	164 50	58 02		3,400 00
Mason	Havana	1,430 00	70 00			1,500 00
Massac						
McDonough						
McHenry	Woodstock	4,406 66	43 34			4,450 00
McHenry	Marengo					
McLean	Bloomington	1,175 00	88 39		396 61	866 78
McLean	Bloomington	8,300 00	581 00	2,546 05	200 00	11,227 05
Menard						
Mercer	Aledo	695 66			695 66	
Monroe						
Montgomery	Hillsboro	25 54			25 54	
Morgan	Jacksonville	7,200 00	319 90	2,342 85		9,862 75
Moultrie						
Ogle	Rochelle					
Peoria						
Perry	Pinckneyville					
Piatt	Monticello					
Pike	Pittsfield	4,400 00	383 30		483 30	4,300 00
Pope	Golconda	605 30			605 30	
Pulaski						
Putnam						
Randolph	Sparta	2,413 00	294 65			2,707 65
Richland						
Rock Island	Hillsdale	270 00	27 95		77 95	220 00
Rock Island	Port Byron					
Saline	Harisburg	2,354 41	624 00		128 00	2,850 41
Saline	ElDorado	3,344 75	208 00	458 73	81 40	3,930 08
Sangamon	Springfield	3,191 80		4,507 95	2,862 50	4,840 50
Schuyler	Rushville	807 29	27 60	248 25	355 54	727 60
Scott						
Shelby	Shelbyville					
Stark	Toulon	1,400 00	112 00		112 00	1,400 00
Stark	Wyoming	2,981 65	218 53		153 92	3,046 26
St. Clair	Belleville					
Stephenson						
Tazewell	Delavan	1,077 74	86 22		670 26	493 70
Tazewell	Mackinaw	487 67		530 00	487 67	530 00
Union	Anna			600 00		600 00
Union	Jonesboro					
Vermilion	Hoopeston			200 00		200 00
Vermilion	Catlin					
Vermilion	Danville	79 80		240 40	79 80	240 40
Wabash						
Warren	Monmouth	552 81	73 02		200 00	425 83
Washington						
Wayne						
White	Carmi	1,840 00	160 00		800 00	1,200 00
Whiteside	Sterling			1,131 33		1,131 33
Whiteside	Morrison	808 86	68 70	270 19	753 37	394 38
Whiteside	Albany	175 00	14 00	669 07		858 07
Will						
Williamson	Marion					
Winnebago	Rockford	3,500 00	210 00			3,710 00
Woodford	ElPaso	2,100 00	168 00			2,268 00
Totals		$105,282 64	$6,529 02	$23,511 55	$25,831 04	$109,442 17

FAIR ASSOCIATIONS, CAPITAL STOCK, REAL ESTATE, VALUE OF IMPROVEMENTS, ETC., 1884.

COUNTIES.	Location of Fair.	Amount authorized capital stock	Numb'r of shar's of stock issued.	Amount of stock issued	Par value per share of stock.	Numb'r of share-hold'rs or members	Cash value of real estate and improvements thereon	Number of volumes in library	Date of incorporation or organization.	Time of holding Fair in 1884.
Adams	Camp Point		496	$4,960 00	$10 00	340	$10,000 00		———, 1876	September 1, 2, 3, 4, 5
Alexander										
Bond										
Boone	Belvidere	$6,070 00	607	6,070 00	10 00	209	12,000 00		January 3, 1867	September 2, 3, 4, 5
Brown	Mt. Sterling	5,000 00	500	3,333 33	10 00	166	4,500 00		April 22, 1880	August 26, 27, 28 and 29
Bureau	Princeton								July 7, 1855	September 16, 17, 18, 19
Calhoun										
Carroll	Mt. Carroll						3,000 00		———, 1857	September 2, 3, 4, 5
Cass	Virginia									August 19, 20, 21, 22
Champaign	Champaign	20,000 00	240	12,000 00	50 00	107	20,000 00		December 28, 1882	August 26, 27, 28, 29, 30
Christian										
Clark										
Clay	Flora	25,000 00	1,000	25,000 00	25 00	130	4,000 00	6	———, 1873	September 30, October 1, 2, 3
Clinton										
Coles	Charleston		99			85	14,000 00		———, 1841	September 9, 10, 11, 12, 13
Cook										
Crawford	Robinson					300	1,500 00		July 14, 1880	September 30, October 1, 2, 3
Cumberland	Toledo	6,000 00	20	4,500 00	225 00	26	5,000 00		July 1, 1883	September 17, 18, 19, 20
DeKalb	Sycamore	2,650 00	530	2,650 00	5 00	132	3,000 00		March 12, 1880	September 16, 17, 18, 19,
DeWitt	Clinton		426	4,260 00	10 00	234	4,500 00		October 4, 1870	August 19, 20, 21, 22
DeWitt	Farmer City	6,000 00	233	5,825 00	25 00	135	6,500 00		June 12, 1883	September 2, 3, 4, 5
Douglas	Tuscola	5,000 00	79	2,237 50		41	2,000 00		August 26, 1872	October 1, 2, 3
DuPage	Wheaton						500 00		———, 1854	September 3, 4, 5
Edgar	Paris		224	5,580 00	25 00	80			June 1, 1861	September 1, 2, 3, 4 5
Edwards	Albion						2,000 00		———, 1856	September 23, 24, 25, 26
Effingham	Effingham									
Fayette	Vandalia	2,000 00	504	2,520 00	5 00		3,000 00		November 5, 1857	September 24, 25, 26, 27
Ford										
Franklin	Benton						4,000 00		———, 1862	October 21, 22, 23, 24
Fulton	Canton									
Fulton	Avon	10,000 00	255	6,375 00	25 00	122	7,000 00		———, 1872	September 23, 24, 25, 26
Gallatin	Gallatin	4,000 00	400	4,000 00	10 00		7,000 00		———, 1872	September 26, 27, 28, 29
Greene	Carrollton	8,000 00	124	6,200 00	50 00	90	9,167 82		March 20, 1875	September 30, October 1, 2, 3
Grundy										
Hamilton	McLeansboro	2,500 00	25	2,500 00	100 00	13	9,000 00		July 29, 1880	September 16, 17, 18, 19, 20
Hancock	Carthage	8,000 00	603	6,030 00	10 00	430	10,000 00		January 3, 1882	September 8, 9, 10, 11, 12
Hancock	Warsaw									

Fair Associations, Capital Stock, etc., 1884—Continued.

COUNTIES.	Location of Fair.	Amount authorized capital stock	Numb'r of shar's stock issued	Amount of stock issued	Par value per share of stock	Numb'r of share-hold'rs or members	Cash value of real estate and improvements thereon	Number of volumes in library	Date of incorporation or organization.	Time of holding Fair in 1884.
Hardin	Elizabethtown	$1,500 00	200	$1,000 00	$5 00	96	$2,500 00	100	September 2, 1870	September 24, 25, 26, 27
Henderson	Biggsville					300	3,500 00		———, 1855	September 9, 10, 11, 12
Henry	Cambridge	10,000 00	402	2,010 00	5 00	68	10,000 00		September 12, 1872	September 4, 5, 6, 7, 8, 9
Iroquois										
Jackson	Murphysboro	5,000 00	200	5,000 00	25 00	50	5,000 00		July 19, 1869	September 30, October 1, 2, 3
Jackson	Carbondale	5,000 00	80	4,000 00	50 00	25	4,500 00		November 20, 1879	October 13, 14, 15, 16, 17
Jasper	Newton	3,000 00	300	3,000 00	10 00	93	4,000 00		March 20, 1880	September 16, 17, 18, 19
Jefferson	Mt. Vernon	6,000 00		6,000 00		15			July 23, 1880	October 14, 15, 16, 17
Jersey	Jerseyville	20,000 00	513	12,825 00	25 00	430	20,788 76	91	April 3, 1868	October 14, 15, 16, 17
JoDaviess	Galena	25,000 00	2,500	12,500 00	5 00	250	10,000 00		———, 1856	September 30, October 1, 2, 3
JoDaviess	Warren	10,000 00	500	10,000 00	20 00	45	4,000 00	20	———, 1869	September 16, 17, 18, 19
Johnson										
Kane										
Kankakee	Kankakee						6,000 00		———, 1856	September 2, 3, 4, 5
Kendall	Yorkville						3,000 00		———, 1852	September 2, 3, 4, 5
Knox	Knoxville					185	10,000 00	100	———, 1851	September 1, 2, 3, 4, 5
Lake	Libertyville								October 15, 1851	September 17, 18, 19, 20
Lake	Waukegan	12,000 00	328	8,200 00	25 00	80	20,000 00		June 5, 1871	September 29, 30, Oct. 1, 2, 3, 4, 5, 6
LaSalle	Mendota	7,000 00	252	6,300 00	25 00	248	6,500 00		———, 1882	September 1, 2, 3, 4, 5, 6
Lawrence										
Lee										
Livingston	Fairbury	6,000 00	216	5,400 00	25 00	200	9,000 00		March 25 1876	September 15, 16, 17, 18, 19
Logan	Lincoln	15,000 00	150	15,000 00	100 00	108	15,000 00		April 30, 1884	August 25, 26, 27, 28, 29
Logan	Atlanta	20,000 00	296	5,920 00	20 00	184	6,000 00	56	———, 1860	September 2, 3, 4, 5
Macon	Decatur	10,000 00	82	10,000 00	10 00	1,000			———, 1857	September 16, 17, 18, 19
Macoupin	Carlinville	6,500 00	253	6,325 00	25 00	244	6,500 00	25	May 1, 1880	September 30, October 1, 2, 3
Madison										
Marion	Salem		30	900 00	30 00	30	2,500 00		March 12, 1881	October 28, 29, 30, 31
Marshall	Wenona		290	7,250 00	25 00	290	6,000 00		July 15, 1874	September 29, 30, Oct. 1, 2, 3
Mason	Havana	5,000 00								September 30, October 1, 2, 3
Massac										
McDonough										
McHenry	Woodstock									September 2, 3, 4, 5
McHenry	Marengo	2,200 00	220	2,200 00	10 00	73	2,500 00		June 8, 1881	September 16, 17, 18, 19
McLean	Bloomington	10,000 00	250		12 50	126	18,000 00	63	February 12, 1853	September 9, 10, 11, 12
McLean	Bloomington	2,000 00	159	1,590 00	10 00	152	2,360 00		June 30, 1882	September 16, 17, 18, 19
Menard										

Mercer	Aledo						6,600 00		March 1854	September 16, 17, 18, 19
Monroe										
Montgomery	Hillsboro						3,000 00		———, 1854	September 23, 24, 25, 26
Morgan	Jacksonville	10,000 00	374	7,480 00	20 00				August 31, 1851	August 25, 26, 27, 28, 29
Moultrie										
Ogle	Rochelle	6,000 00	600	6,000 00	10 00	499	6,000 00		July 31, 1883	September 23, 24, 25, 26
Peoria										
Perry	Pinckneyville						7,000 00			October 7, 8, 9, 10
Piatt	Monticello	3,500 00	700	3,500 00	5 00	90	8,000 00		———, 1856	August 18, 19, 20, 21, 22
Pike	Pittsfield						6,000 00		———, 1852	September 23, 24, 25, 26
Pope	Golconda						5,000 00		———, 1859	October 1, 2, 3, 4
Pulaski										
Putnam										
Randolph	Sparta								———, 1851	October 15, 16, 17
Richland										
Rock Island	Hillsdale		18				1,000 00		———, 1870	September 9, 10, 11, 12
Rock Island	Port Byron					30	1,200 00		———, 1876	September 9, 10, 11, 12
Saline	Harrisburg	7,500 00	361	3,610 00	10 00	45	6,950 00		February 10, 1880	September ,3 4, 5
Saline	ElDorado	7,000 00	399	3,990 00	10 00	101	6,550 00		June 9, 1881	September 23, 24, 25, 26, 27
Sangamon	Springfield	25,000 00	489	12,225 00	25 00	489	800 00	60	———, 1853	September 1, 2, 3, 4, 5, 6
Schuyler	Rushville					600	3,200 00		———, 1856	August 19, 20, 21, 22
Scott										
Shelby	Shelbyville	5,000 00	359	3,590 00	10 00	117	4,000 00		June 6, 1857	September 16, 17, 18, 19, 20
Stark	Toulon						18,000 00		———, 1853	September 23, 24, 25, 26
Stark	Wyoming	10,000 00	1,010	10,100 00	10 00	221	1,200 00	3	January 24, 1881	September 2, 3, 4 5
St. Clair	Belleville	6,000 00	240	1,200 00	25 00	37			April 20, 1882	September 16, 17, 18, 19
Stephenson										
Tazewell	Delavan	6,000 00	571	5,710 00	10 00	287	7,500 00		July 8, 1879	September 15, 16, 17, 18, 19
Tazewell	Mackinaw	2,000 00	200	2,000 00	10 00	200	1,936 79	12	September 9, 1883	September 9, 10, 11, 12
Union	Anna	7,000 00	622	6,220 00	10 00	233	7,000 00		March 24, 1880	August 26, 27, 28, 29
Union	Jonesboro						8,000 00		———, 1855	September 16, 17, 18, 19
Vermilion	Hoopeston	5,000 00	337	3,337 00	10 00	65	5,000 00		July 14, 1873	August 25, 26, 27, 28, 29
Vermilion	Catlin									
Vermilion	Danville					285	15,000 00		———, 1858	September 21, 22, 23, 24, 25
Wabash										
Warren	Monmouth				10 00	288	6,500 00		August 7, 1852	September 2, 3, 4, 5
Washington										
Wayne										
White	Carmi	5,000 00	400	4,000 00	10 00	225	8,000 00		May 3, 1879	September 2, 3, 4, 5, 6
Whiteside	Sterling					146	2,000 00		———, 1855	August 26, 27, 28, 29
Whiteside	Morrison					1,000	4,290 00		———, 1872	September 2 3, 4 5
Whiteside	Albany	1,000 00	100	1,000 00	10 00	100	500 00		February 3, 1884	September 17, 18, 19
Will										
Williamson	Marion						2,000 00			September 9, 10, 11, 12
Winnebago	Rockford	8,000 00	1 563	7,815 00	5 00	180	40,000 00			September 1, 2, 3, 4, 5
Woodford	El Paso	5,000 00	441	4,410 00	10 00	209	6,000 00		January 28, 1880	September 22, 23, 24, 25, 26, 27
Totals		$410,420 00	22,370	$315,647 83	$1267 50	12,469	$517,482 58	536		

REPORT OF PURE BRED STOCK EXHIBITED AT ILLINOIS AGRICULTURAL FAIRS, 1884.

COUNTIES.	Location of Fair.	SHORT-HORN CATTLE.					HEREFORD.					DEVON.					POLLED ANGUS.				
		Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county.		Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county.		Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county.		Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county.	
					Number of entries	Amount of premiums paid				Number of entries	Amount of premiums paid				Number of entries	Amount of premiums paid				Number of entries	Amount of premiums "
Adams	Camp Point	26	$180	$150	26	$150	1	$189	$8	1	$8						12	$180	$75	1	$12
Alexander																					
Bond																					
Boone	Belvidere		49					49					$37					37			
Brown	Mt. Sterling																				
Bureau	Princeton	20	164	133	20	133		101										101			
Calhoun																					
Carroll	Mt. Carroll	28	128	116	15	75											1	128	10	1	10
Cass	Virginia	21	158	107																	
Champaign	Champaign	25	78	73	13	14															
Christian																					
Clark																					
Clay	Flora																				
Clinton																					
Coles	Charleston	51	264	228	45	173	43	264	204	43	204						6	264	25	6	25
Cook																					
Crawford	Robinson																				
Cumberland	Toledo	17	119	115	1	8		94													
DeKalb	Sycamore	28	63	57	16	31	3	63	13	3	13		63					63			
DeWitt	Clinton	13	166	144	13	144		66					66					66			
DeWitt	Farmer City	31	155	151	17	138		80					80								
Douglas	Tuscola	20			20		9			9											
DuPage	Wheaton																				
Edgar	Paris	62	715	710	12	60		50													
Edwards																					
Effingham	Effingham	12	89	58	6	58															
Fayette	Vandalia	56	69	17	56	17															
Ford																					
Franklin	Benton	8	84	47	1	5															
Fulton	Canton	18	82	75			10	56	56	10	56										

Fulton	Avon	25	98	73			10	98	27			8	96	17			5	98	10		
Gallatin	Shawneetown	11	174	164	4	23															
Greene	Carrollton	8	100	53	8	53		100									2	16	10	2	10
Grundy																					
Hamilton	McLeansboro	21	84	84	18	52															
Hancock	Carthage	11	144	78	11	78		144									11	144	64	11	64
Hancock	Warsaw																				
Hardin	Elizabethtown																				
Henderson	Biggsville	17	94	62	17	62															
Henry	Cambridge	11	120	117	11	117	5	120	55	5	55						3	120	40	3	40
Iroquois																					
Jackson	Murphysboro	1	66		1			66				1	66		1						
Jackson	Carbondale	12	186	165	4	15		186					186					186			
Jasper	Newton	10	150	39	9	33		150													
Jefferson	Mt. Vernon	20	89	71	20	71															
Jersey	Jerseyville																				
JoDaviess	Galena	41	72	57	41	57															
JoDaviess	Warren	36	85	82			4	18	9												
Johnson																					
Kane																					
Kankakee	Kankakee	15					1										1				
Kendall	Yorkville	21	43	31			3	43	8				43				4	43	14		
Knox	Knoxville	16	190	180	16	180	8	90	80	8	80	13	90	90	13	90	8	190	70	8	70
Lake	Libertyville											5	81	13	5	13	10	81	22	10	22
Lake	Waukegan	6	73	30	6	30		73					73				8	73	36	8	36
LaSalle	Mendota	23	74	64				50					50					50			
Lawrence																					
Lee																					
Livingston	Fairbury	8	210	49	8	49	6	210	47	6	47	10	134	98				184			
Logan	Lincoln	18	70	53	18	53	15	70	57												
Logan	Atlanta	29	190	169				70									3	70	17		
Macon	Decatur	6	96	20	6	20	6	96	25								2	96	7	2	7
Macoupin	Carlinville																				
Madison																					
Marion	Salem	39	317	211	27	136															
Marshall	Wenona																				
Mason	Havana																				
Massac																					
McDonough																					
McHenry	Woodstock	45	75	69	45	69						3	75	15	3	15	8	75	39	8	39
McHenry	Marengo	38	63	61			4	39	14									39			
McLean	Bloomington	11	104	73	11	73		114													
McLean	Bloomington	1	43	4	1	4															
Menard																					
Mercer	Aledo	7	122	49	7	49	2	122	22	2	22						9	244	71	9	71
Monroe																					
Montgomery	Hillsboro		41				7	41	28	7	28	3	41	22	3	22	1	41	6	1	6
Morgan	Jacksonville	26	142	115	26	115	8	142	72				142					142			
Moultrie																					
Ogle	Rochelle						25	88	71	25	71						8	88	58	8	58
Peoria																					
Perry	Pinckneyville	11	58	40	6	17											1	13	8	1	8

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	SHORT-HORN CATTLE.					HEREFORD.					DEVON.					POLLED ANGUS.				
		Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid
Piatt	Monticello	36	$260	$115	6	$25															
Pike	Pittsfield	25	164	61	25	61															
Pope	Golconda																				
Pulaski																					
Putnam																					
Randolph	Sparta	5	80	22	5	22															
Richland																					
Rock Island	Hillsdale	5	30	20			8	$30	$11								1	$30	$1		
Rock Island	Port Byron	7	42	24	2	8															
Saline	Harrisburg																				
Saline	Eldorado	5	75	32	1	6		75					$75								
Sangamon	Springfield	26	160		12		24	160					160					160			
Schuyler	Rushville	24	113	83	24	83							74								
Scott																					
Shelby	Shelbyville	28	236	212	13	58															
Stark	Toulon	15	82	82	4	9						3	82	$18	3	$18	3	82	14	3	$14
Stark	Wyoming	13	84	53				84				5	84	24			3				
St. Clair	Belleville	13	133	131	13	131		133					133					133			
Stephenson																					
Tazewell	Delavan	6	57	26	6	26	22	140	140												
Tazewell	Mackinaw	14	19	6	14	6	14	19	6	14	$6										
Union	Anna	4	114	16	4	16		114					114					114			
Union	Jonesboro																				
Vermilion	Hoopeston	22	154	154	22	154	11	154	154									154			
Vermilion	Catlin	13	81	52	13	52		77													
Vermilion	Danville	20	154	134	9	90		154													
Wabash																					
Warren	Monmouth	13	144	94	13	94											17	159	145		
Washington																					
Wayne																					

White	Carmi	18	127	111	1	8	....	....	....	....	......	....	....	....	....	......	....	....	....	....	......
Whiteside........	Sterling	...	.... ..	....	....	......	....	....	....	....	......	...	....	....	....	......	....	....	....	....	......
Whiteside........	Morrison	26	69	58	....	......	6	69	32	....	......	....	....	....	....	......	...	....	....	..	......
Whiteside........	Albany	20	77	68	20	68	...	77	....	....	......	....	....	....	....	......	1	77	3	1	3
Will...............	....	....	....	......	....	....	....	....	....	....	......	....	....	....	....	......	....	....	....	...	......
Williamson	Marion	5	81	34	5	34	.. .	....	....	....	......	....	....	....	...	......	....	....	....	....	......
Winnebago	Rockford.......	38	60	53	25	13	24	60	53	24	53	...	60	... ...	....	......	....	60	....	....	......
Woodford........	El Paso........	...	....	....	....	......	....	....	....	...	......	....	....	....	....	......	....	....	......	....	......
Totals	....	1381	$8,532	$6,085	819	$3,321	279	$4,479	$1,192	157	$643	51	$2,105	$297	28	$158	128	$3,801	$745	83	$495

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	HOLSTEIN.					AYRSHIRE.					JERSEY.				
		Number of entries	Amount premiums offered	Amount premiums paid	Owned in county.		Number of entries	Amount premiums offered	Amount premiums paid	Owned in county.		Number of entries	Amount premiums offered	Amount premiums paid	Owned in county.	
					No. of entries	Am'nt prem's paid				No. of entries	Am'nt prem's paid				No. of entries	Am'nt prem's paid
Adams	Camp Point	9	$180	$54	9	$54						29	$180	$93	22	$93
Alexander																
Bond																
Boone	Belvidere	1	37									4	37	9	4	9
Brown	Mt. Sterling															
Bureau	Princeton	4	101	47	4	47						23	164	149	23	145
Calhoun																
Carroll	Mt. Carroll	9	68	41	9	41						3	68	13	3	13
Cass	Virginia											17	119	76		
Champaign	Champaign											4	22	15	4	15
Christian																
Clark																
Clay	Flora															
Clinton																
Coles	Charleston											17	112	60	17	60
Cook																
Crawford	Robinson															
Cumberland	Toledo											5	94	32	5	32
DeKalb	Sycamore		63					$63				13	63	43	13	43
DeWitt	Clinton											1	66	4	1	4
DeWitt	Farmer City		40					40				11	80	59		
Douglas	Tuscola															
DuPage	Wheaton	2		4												
Edgar	Paris											18	72	68	18	68
Edwards																
Effingham	Effingham						3	84	21	3	21					
Fayette	Vandalia											4	70	7	4	7
Ford																
Franklin	Benton											3	78	12	1	6
Fulton	Canton											4	26	26	4	26
Fulton	Avon											22	52	40		

Gallatin	Shawneetown											22	159	154	5	10
Greene	Carrollton											2	100	11	2	11
Grundy																
Hamilton	McLeansboro											8	84	36	8	36
Hancock	Carthage	23	144	126	23	126						15	144	90	8	50
Hancock	Warsaw															
Hardin	Elizabethtown															
Henderson	Biggsville	17	94	77	17	62						7	94	42	7	42
Henry	Cambridge	7	120	68	7	68						7	120	60	7	60
Iroquois																
Jackson	Murphysboro		66									3	66	10	3	10
Jackson	Carbondale	8	186	128	8	128		141				12	141	58	12	58
Jasper	Newton											21	150	30	21	30
Jefferson	Mt. Vernon											14	84	52	14	52
Jersey	Jerseyville															
JoDaviess	Galena															
JoDaviess	Warren															
Johnson																
Kane																
Kankakee	Kankakee															
Kendall	Yorkville		43					43					43			
Knox	Knoxville		90									14	190	190	14	190
Lake	Libertyville	30	81	45	10	45						1	81	4	1	4
Lake	Waukegan	11	73	41	11	41		73				3	73	9	3	9
LaSalle	Mendota		50					50				3	50	17	3	17
Lawrence																
Lee																
Livingston	Fairbury	4	164	25	4	25		134				3	134	17	3	17
Logan	Lincoln	5	70	26	5	26						8	70	30	8	30
Logan	Atlanta	1	63	5			16	63	43							
Macon	Decatur	3	96	11	3	11						17	96	49	17	49
Macoupin	Carlinville															
Madison																
Marion	Salem															
Marshall	Wenona															
Mason	Havana															
Massac																
McDonough																
McHenry	Woodstock	17	75	42	17	42	2	75	8	2	18	3	75	11	3	11
McHenry	Marengo	24	53	50			13	49	33							
McLean	Bloomington												80			
McLean	Bloomington											4	43	12	4	12
Menard																
Mercer	Aledo											4	122	26	4	26
Monroe																
Montgomery	Hillsboro	1	41	6	1	6							41			
Morgan	Jacksonville		142					142				11	142	99	11	99
Moultrie																
Ogle	Rochelle															
Peoria																
Perry	Pinckneyville											8	58	24	8	24
Piatt	Monticello											6	70	70	1	

Report of Pure Bred Stock—Continued.

Counties.	Location of Fair.	Holstein.					Ayrshire.					Jersey.				
		Number of entries	Amount premiums offered	Amount premiums paid	Owned in county.		Number of entries	Amount premiums offered	Amount premiums paid	Owned by county.		Number of entries	Amount premiums offered	Amount premiums paid	Owned in county.	
					No. of entries	Am'nt prem's paid				No. of entries	Am'nt prem's paid				No of entries	Am'nt prem's paid
Pike	Pittsfield	2	$120		2											
Pope	Golconda															
Pulaski																
Putnam																
Randolph	Sparta											24	$72	$58	24	$58
Richland																
Rock Island	Hillsdale	3	30	$5												
Rock Island	Port Byron	15	42	24	15	$24						12	42	14	12	14
Saline	Harrisburg											4	30	9		
Saline	Eldorado											4	75	26	4	26
Sangamon	Springfield		160					$160				20	160		14	
Schuyler	Rushville	1	21	8									74			
Scott																
Shelby	Shelbyville											17	71	71		
Stark	Toulon	8	82	38	8	38										
Stark	Wyoming	9	84	39								1	84	8		
St. Clair	Belleville	39	133	113	20	70	12	266	$83	12	$83	30	133	91	30	91
Stephenson																
Tazewell	Delavan	5	57	26	5	26	10	57	30	10	30	8	57	34	8	34
Tazewell	Mackinaw											1	19	1	1	1
Union	Anna	4	114	37								12	114	82	9	50
Union	Jonesboro															
Vermilion	Hoopeston		50										10			
Vermilion	Catlin												52			
Vermilion	Danville											2	30	15		
Wabash																
Warren	Monmouth											17	84	56	10	31
Washington																
Wayne																
White	Carmi											10	127	80	2	18
Whiteside	Sterling	5	108	41			1	108	15			36	187	167		

Whiteside	Morrison	9	69	19								9	69	42		
Whiteside	Albany	3	77	16	3	16						13	77	44	2	8
Will																
Williamson	Marion															
Winnebago	Rockford	39	60	52	39	52		60				28	60	52	28	52
Woodford	El Paso															
Totals		312	$3,347	$1,214	220	$948	57	$1,608	$233	27	$152	622	$5,440	$2,657	430	$1,751

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	THOROUGHBRED HORSES.					ROADSTERS.					NORMAN AND FRENCH DRAFT.					CLYDESDALE AND ENGLISH DRAFT.				
		No. of entries....	Amount of premiums offered....	Amount of premiums paid......	Owned in county. Number of entries...	Owned in county. Amount of premiums paid.......	No. of entries...	Amount of premiums offered....	Amount of premiums paid......	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......	No. of entries	Amount of premiums offered ...	Amount of premiums paid	Owned in county. Number of entries....	Owned in county. Amount of premiums paid	No. of entries...	Amount of premiums offered..	Amount of premiums paid......	Owned in county. Number of entries....	Owned in county. Amount of premiums paid......
Adams	Camp Point	59	$146	$146	49	$108	273	$784	$784	120	$475	68	$161	$157	49	$92					
Alexander																					
Bond																					
Boone	Bellevidere	1	40				26	50	48	7	28	20	50	37	8	33					
Brown	Mt. Sterling																				
Bureau	Princeton						61	153	130	44	101	19	131	95	19	95	26	$131	$101	20	$53
Calhoun																					
Carroll	Mt. Carroll	10	61	33	9	33	27	95	67	27	67	7	61	24	7	24	1	61	11	1	11
Cass	Virginia						78	204	83												
Champaign	Champaign	5	75	27	5	27	31	75	64	26	43										
Christian																					
Clark																					
Clay	Flora						8	56	30	8	30										
Clinton																					
Coles	Charleston						98	501	461	76	313	3	40	20	3	20	3	40	20	3	20
Cook																					
Crawford	Robinson																				
Cumberland	Toledo						16	131	89	10	44	38	138	131	21	78					
DeKalb	Sycamore						26	68	55	23	46										
DeWitt	Clinton											14	69	22	14	22					
DeWitt	Farmer City						64	939	800	20	54	14	116	60							
Douglas	Tuscola	29			29		43			43											
DuPage	Wheaton																5		36		
Edgar	Paris	5	30	30	4	10															
Edwards																					
Effingham	Effingham																20	83	57	20	57
Fayette	Vandalia						40	90	22	40	22						37	90	22	37	22
Ford																					
Franklin	Benton	5	190	70	2	30															
Fulton	Canton						12	80	60	9	55	1	12	12	1	12					
Fulton	Avon																				

Gallatin	Shawneetown	21	$185	$155	4	$20						8	$152	$59	1	$5					
Greene	Carrollton	5	104	36	5	36	79	$104	$104	51	$51										
Grundy																					
Hamilton	McLeansboro	6	77	14								9	82	32							
Hancock	Carthage						176	295	290	100	175	17	120	54	17	54	17	$240	$70	14	$60
Hancock	Warsaw																				
Hardin	Elizabethtown																				
Henderson	Biggsville	1	32	10								26					14				
Henry	Cambridge						25	165	131	25	131										
Iroquois																					
Jackson	Murphysboro	10	84	49	10	49	16	84	48	16	48						6	84	17	6	17
Jackson	Carbondale											1	176					252			
Jasper	Newton	6	100	42	4	40	13	110	88	13	80	6	100	40	4	24					
Jefferson	Mt. Vernon	2	97	6			18	62	57	18	57										
Jersey	Jerseyville	2	35	35			190	310	310	113	285										
Jo Daviess	Galena						14	38	29	14	29										
Jo Daviess	Warren						9	36	21												
Johnson																					
Kane																					
Kankakee	Kankakee						19					10					8				
Kendall	Yorkville	1	36	6			64	65	58			26	76	56			6	51	21		
Knox	Knoxville	7	80	80	7	80	100	900	700	90	700										
Lake	Libertyville	28	37	12	28	12	44	75	27	44	27	20	37	13	20	13	12	87	31	18	31
Lake	Waukegan						74	128	128	65	123		83				14	83	64	12	64
La Salle	Mendota	2	78	10			42	90	87	42	87	8	89	45	8	45	16	89	63	9	33
Lawrence																					
Lee																					
Livingston	Fairbury	13	134	76	3	17	10	173	140	30	75	67	301	254	6	55	19	301	94	2	32
Logan	Lincoln	16	87	55			56	87	84	39	61										
Logan	Atlanta						66	131	102												
Macon	Decatur	6	116	19	6	19	67	122	67	60	35						28	116	50	28	50
Macoupin	Carlinville	10	95	42	8	42	50	161	146	20	50	48	141	141	37	100					
Madison																					
Marion	Salem	5					18					3									
Marshall	Wenona	13	113	53			52	113	96			12	113	68			83	226	205		
Mason	Havana																				
Massac																					
McDonough																					
McHenry	Woodstock						125	201	121	115	112										
McHenry	Marengo						28	47	46			3	54	13			2	53	21		
McLean	Bloomington						23	180	113	23	113	14	200	106	14	106	15	271	176	15	176
McLean	Bloomington											8	9	9	8	9	1	2	2	1	2
Menard																					
Mercer	Aledo						65	141	104	65	104										
Monroe																					
Montgomery	Hillsboro	3	52		3		3	150	50	3	50	2			2		7			1	
Morgan	Jacksonville	2	120	18																	
Moultrie																					
Ogle	Rochelle	38	122	100	38	100	37	89	84	25	43	42	89	76	42	76					
Peoria																					
Perry	Pinckneyville	3	151	31			5	39	29	3	14										
Piatt	Monticello	1	75	10	1	10	31	95	77	24	47										

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	THOROUGHBRED HORSES.					ROADSTERS.					NORMAN AND FRENCH DRAFT.					CLYDESDALE AND ENGLISH DRAFT.				
		No. of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	No. of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	No. of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	No. of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid
Pike	Pittsfield	25	$65		20		41	$115		35											
Pope	Golconda																				
Pulaski																					
Putnam																					
Randolph	Sparta	5	200	$100	2	$60															
Richland																					
Rock Island	Hillsdale						11	63	$38			15	$32	$23			26	$78	$72		
Rock Island	Port Byron																				
Saline	Harrisburg	6	105	37	1	10															
Saline	El Dorado	12	102	68								1	30	10							
Sangamon	Springfield	60	210		43		57	215		30											
Schuyler	Rushville	6	108	27	1	4	27	108	89	13	$47										
Scott																					
Shelby	Shelbyville											3	25	21	3	21	10	83	78	10	78
Stark	Toulon																15	104	59	15	59
Stark	Wyoming						24	99	78								42	198	147		
St. Clair	Belleville	5	174	33	3	16	69	174	166	52	148	12	174	73	12	73	2	348	25	2	25
Stephenson																					
Tazewell	Delavan	4	75	13			80	101	101	24	75										
Tazewell	Mackinaw	55	31	24	55	24						6	31	10	6	10	11	63	16	11	16
Union	Anna						12	209		7											
Union	Jonesboro																				
Vermilion	Hoopeston	5	48	48			25	56	56	14	32	18	121	121	8	28	18	121	121	4	10
Vermilion	Catlin						26	108	95	18	83	61	109				46	199	100	4	100
Vermilion	Danville	4	120	90	3	65	28	40	40	2	25	44	140	138	27	98	27	130	110	20	110
Wabash																					
Warren	Monmouth	17	154	107	17	107	56	184	170	56	170	18	154	118	13	90	21	154	118	21	118
Washington																					
Wayne																					
White	Carmi	8	164	68																	
Whiteside	Sterling																				

Whiteside	Morrison	....	......	......	....	....	....	....	......	....	....	3	12	12	....	....	....	......	......	....	....
Whiteside	Albany	....	......	......	....	....	....	....	......	....	....	....	......	......	....	....	....	......	......	....	....
Will		....	......	......	....	....	--	....	......	....	....	....	......	......	....	....	....	......	......	....	....
Williamson	Marion	1	96	8	1	8	....	....	......	....	....	1	96	12	1	12	....	......	......	....	....
Winnebago	Rockford	11	89	47	11	47	29	80	60	29	60	--	......	......	....	....	....	......	......	....	....
Woodford	ElPaso	10	78	43	3	12	56	88	83	49	78	57	109	85	21	34	38	109	65	9	5
Totals.		549	$4,362	$1,878	375	$986	2863	$9,057	$7,006	1680	$4,493	753	$3,633	$2,147	372	$1,229	596	$3,847	$1,972	283	$1,149

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	COTSWOLD SHEEP.					LEICESTER AND OTHER LONG WOOLS.					SOUTHDOWNS.				
		No. of entries....	Amount of premiums offered....	Amount of premiums paid	Owned in county.		No. of entries....	Amount of premiums offered....	Amount of premiums paid	Owned in county.		No. of entries....	Amount of premiums offered....	Amount af premiums paid	Owned in county.	
					Number of entries....	Amount of premiums paid.......				Number of entries....	Amount of premiums paid.				Number of entries....	Amount of premiums paid,.......
Adams	Camp Point	24	$53	$50	12	$37						23	$53	$48	17	$46
Alexander																
Bond																
Boone	Belvidere							$23								
Brown	Mt. Sterling															
Bureau	Princeton						36	184	$108	30	$92					
Calhoun																
Carroll	Mt. Carroll						6	26	14	6	14	5	26	15	5	15
Cass	Virginia	10	59	21												
Champaign	Champaign						14	38	38	4	12					
Christian																
Clark																
Clay	Flora						5	30	16	4	12					
Clinton																
Coles	Charleston						7	28	18	7	18	7	28	20	7	20
Cook																
Crawford	Robinson															
Cumberland	Toledo						7	27	19							
DeKalb	Sycamore						5	30	17	5	17		30			
DeWitt	Clinton	6	27	19	6	19						11	27	19	11	19
DeWitt	Farmer City	3	23	10	1	4						24	23	23	4	4
Douglas	Tuscola	7			7							3			3	
DuPage	Wheaton						5		15							
Edgar	Paris						14	30	16	14	16	9	30	27	9	27
Edwards																
Effingham	Effingham	15	71	45	15	45										
Fayette	Vandalia	9	27	7	9	7						8	27	7	8	7
Ford																
Franklin	Benton	1	10	5	1	5										
Fulton	Canton						16	38	38	16	38	26	38	38	26	38
Fulton	Avon						14	17	16							
Gallatin	Shawneetown	7	34	23	4	11						9	34	22		
Greene	Carrollton															
Grundy																

Hamilton	McLeansboro	4	28	7	4	7	4	28	9	4	9	7	28	15	7	15
Hancock	Carthage						27	40	40	27	40					
Hancock	Warsaw															
Hardin	Elizabethtown															
Henderson	Biggsville															
Henry	Cambridge															
Iroquois																
Jackson	Murphysboro		33				1	33	5	1	5		33			
Jackson	Carbondale	9	38	38			1	38	3				38			
Jasper	Newton	10	40	14	9	10						9	40	20	6	16
Jefferson	Mt. Vernon	12	34	31	10	23	13	34	34	11	26					
Jersey	Jerseyville															
JoDaviess	Galena	11	24	18	11	18	10	24	20	10	20					
JoDaviess	Warren	9	24	18												
Johnson																
Kane																
Kankakee	Kankakee															
Kendall	Yorkville						6	16	11							
Knox	Knoxville	40	37	30	40	30										
Lake	Libertyville						21	40	35	21	35					
Lake	Waukegan	5	45	24	5	24	3	45	12	3	12	9	45	28	9	28
LaSalle	Mendota						8	36	26	8	26	12	36	28	9	24
Lawrence																
Lee																
Livingston	Fairbury						9	48	40			12	48	42	5	17
Logan	Lincoln															
Logan	Atlanta						5	18	2			4	18	13		
Macon	Decatur	13	38	19	13	19						4	38	9	4	9
Macoupin	Carlinville	9	41	35	9	35										
Madison																
Marion	Salem	2					4					5				
Marshall	Wenona	11	48	48			7	48	40							
Mason	Havana															
Massac																
McDonough																
McHenry	Woodstock															
McHenry	Marengo											17	15	15		
McLean	Bloomington															
McLean	Bloomington						15	30	30	15	30	9	31	22	9	22
Menard																
Mercer	Aledo						27	42	40	13	23					
Monroe																
Montgomery	Hillsboro						2	18	18	2	18					
Morgan	Jacksonville															
Moultrie																
Ogle	Rochelle	4	13	11	4	11	7	36	24	7	24	10	12	12	10	12
Peoria																
Perry	Pinckneyville	10	29	20	10	20										

Report of [Pure] Bred Stock—Continued.

COUNTIES.	Location of Fair.	COTSWOLD SHEEP.					LEICESTER AND OTHER LONG WOOLS.					SOUTHDOWNS.				
		No. of entries....	Amount of premiums offered...	Amount of premiums paid	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......	No. of entries....	Amount of premiums offered....	Amount of premiums paid	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......	No. of entries....	Amount of premiums offered.. .	Amount of premiums paid	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......
Piatt	Monticello						13	$63	$31	13	$31					
Pike	Pittsfield						11	38	10	11	10					
Pope	Golconda															
Pulaski																
Putnam																
Randolph	Sparta	8	$28	$16	8	$16						12	$40	$31	12	$31
Richland																
Rock Island	Hillsdale	5	18	13								1	17	5	1	5
Rock Island	*Port Byron*															
Saline	Harrisburg															
Saline	El Dorado	8	25	22	8	22							25			
Sangamon	Springfield							73								
Schuyler	Rushville											12	49	25	12	25
Scott																
Shelby	Shelbyville						20	34	34	20	34	26	34	34	16	17
Stark	Toulon						16	46	43	16	43					
Stark	Wyoming						12	48	45			13	48	45		
St Clair	Belleville	14	54	51	14	51	12	54	45	12	45	20	54	54	20	54
Stephenson																
Tazewell	Delavan						22	39	39	19	34					
Tazewell	Mackinaw															
Union	Anna	2	12	3	2	3							12			
Union	Jonesboro															
Vermilion	Hoopeston	21	27	27	21	27	20	27	27	20	27					
Vermilion	Catlin						16	30	30	16	30	5	13	13	3	13
Vermilion	Danville	12	43	43	7	19	14	33	33	14	33					
Wabash																
Warren	Monmouth						16	33	33	16	33					
Washington																
Wayne																
White	Carmi						5	28	18	5	18	6	28	16	1	3

Whiteside	Sterling						7	40	27							
Whiteside	Morrison						9	24	17							
Whiteside	Albany															
Will																
Williamson	Marion											9	22	14	9	14
Winnebago	Rockford						15	21	20	15	20					
Woodford	El Paso						9	39	28	2	2					
Totals		301	$983	$668	230	$463	516	$1,716	$1,184	387	$847	327	$1,040	$660	223	$481

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	OXFORD DOWNS.					SHROPSHIRE DOWNS.					AMERICAN MERINOS.					SPANISH MERINO AND OTHER FINE WOOLS.				
		No. of entries....	Amount of premiums offered....	Amount of premiums paid......	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......	No. of entries....	Amount of premiums offered....	Amount of premiums paid..	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......	No. of entries....	Amount of premiums offered ...	Amount of premiums paid	Owned in county. Number of entries....	Owned in county. Amount of premiums paid......	No. of entries...	Amount of premiums offered...	Amount of premiums paid	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......
Adams	Camp Point											51	$53	$53	50	$51					
Alexander																					
Bond																					
Boone	Belvidere						6	$22	$12	6	$12						19	$23	$19	9	$19
Brown	Mt. Sterling																				
Bureau	Princeton																				
Calhoun																					
Carroll	Mt. Carroll																				
Cass	Virginia																				
Champaign	Champaign																12	38	38	12	38
Christian																					
Clark																					
Clay	Flora											6	28	15	3	11					
Clinton																					
Coles	Charleston																				
Cook																					
Crawford	Robinson																				
Cumberland	Toledo												27								
DeKalb	Sycamore											9	30	28							
DeWitt	Clinton											9	27	18	9	18					
DeWitt	Farmer City											20	23	23	9	6					
Douglas	Tuscola																	30			
DuPage	Wheaton																9		22		
Edgar	Paris																9	30	27	9	27
Edwards																					
Effingham	Effingham	4	$18	$4	4	$4		89	49		49										
Fayette	Vandalia						11	27	7	11	7										
Ford																					
Franklin	Benton																				
Fulton	Canton																16	38	38	16	38
Fulton	Avon																12	18	18		

Gallatin	Shawneetown											14	34	30							
Greene	Carrollton																				
Grundy																					
Hamilton	McLeansboro						10	28	24	10	24										
Hancock	Carthage																33	40	40	33	40
Hancock	Warsaw																				
Hardin	Elizabethtown																				
Henderson	Biggsville																				
Henry	Cambridge																				
Iroquois																					
Jackson	Murphysboro							33					33								
Jackson	Carbondale						6	38	19	6	19		38								
Jasper	Newton		40					40				21	40	24	6	4					
Jefferson	Mt. Vernon																	34			
Jersey	Jerseyville																				
Jo Daviess	Galena																				
Jo Daviess	Warren																				
Johnson																					
Kane																					
Kankakee	Kankakee																				
Kendall	Yorkville																11	16	14		
Knox	Knoxville																20	37	15	20	15
Lake	Libertyville																18	29	29	18	29
Lake	Waukegan						2	45	9	2	9	9	45	20	9	20					
La Salle	Mendota																17	36	36	9	12
Lawrence																					
Lee																					
Livingston	Fairbury											14	48	45	11	45					
Logan	Lincoln																40	63	57	40	57
Logan	Atlanta																26	18	18		
Macon	Decatur																				
Macoupin	Carlinville																10	41	35	10	35
Madison																					
Marion	Salem																				
Marshall	Wenona																16	48	48		
Mason	Havana																				
Massac																					
McDonough																					
McHenry	Woodstock																100	47	45	100	45
McHenry	Marengo											11	18	11							
McLean	Bloomington											6	31	13	6	13					
McLean	Bloomington						1	1	1	1	1										
Menard																					
Mercer	Aledo											18	42	42	10	20					
Monroe																					
Montgomery	Hillsboro						4	10	10	4	10	6					6	15	15	6	15
Morgan	Jacksonville																				
Moultrie																					
Ogle	Rochelle											16	36	29	16	29	6	19	19	6	19
Peoria																					
Perry	Pinckneyville																				
Piatt	Monticello																				

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	OXFORD DOWNS.					SHROPSHIRE DOWNS.					AMERICAN MERINOS.					SPANISH MERINO AND OTHER FINE WOOLS.				
		No. of entries....	Amount of premiums offered....	Amount of premiums paid......	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......	No. of entries....	Amount of premiums offered....	Amount of premiums paid......	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......	No. of entries....	Amount of premiums offered....	Amount of premiums paid......	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......	No. of entries....	Amount of premiums offered...	Amount of premiums paid......	Owned in county. Number of entries....	Owned in county. Amount of premiums paid.......
Pike	Pittsfield																12	$38	$19	12	$19
Pope	Golconda																				
Pulaski																					
Putnam																					
Randolph	Sparta																				
Richland																					
Rock Island	Hillsdale																				
Rock Island	Port Byron																				
Saline	Harrisburg																				
Saline	El Dorado												$25								
Sangamon	Springfield																	73			
Schuyler	Rushville																				
Scott																					
Shelby	Shelbyville											16	49	$49	16	$49					
Stark	Toulon																				
Stark	Wyoming											2	48	8							
St. Clair	Belleville						20	$54	$54	20	$54	6	54	35	6	35		38			
Stephenson																					
Tazewell	Delavan																13	37	37		
Tazewell	Mackinaw																				
Union	Anna						1	12	5	1	5		12								
Union	Jonesboro																				
Vermilion	Hoopeston																				
Vermilion	Catlin											11	22	20			5	8	8	5	8
Vermilion	Danville											19	33	33	19	33					
Wabash																					
Warren	Monmouth																21	33	33	16	33
Washington																					
Wayne																					
White	Carmi																	28			
Whiteside	Sterling						27	40	40								7	40	9		

Whiteside	Morrison																10	24	24		
Whiteside	Albany																				
Will																					
Williamson	Marion						1	22	4	1	4										
Winnebago	Rockford																8	21	17	8	17
Woodford	ElPaso																12	39			
Totals		4	$58	$4	4	$4	89	$461	$234	62	$194	210	$796	$496	170	$334	468	$999	$680	329	$466

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	BERKSHIRE SWINE.					POLAND CHINA.					CHESTER WHITE.				
		Number of entries	Amount premiums offered	Amount premiums paid	Owned in county. No. of entries	Owned in county. Am'nt prem's paid	Number of entries	Amount premiums offered	Amount premiums paid	Owned in county. No. of entries	Owned in county. Am'nt prem's paid	Number of entries	Amount premiums offered	Amount premiums paid	Owned in county. No. of entries	Owned in county. Am'nt prem's paid
Adams	Camp Point	45	$87	$83			71	$87	$87	24	$18					
Alexander																
Bond																
Boone	Belvidere	6	37	14	5	$14	18	37	28	10	28		$35			
Brown	Mt. Sterling															
Bureau	Princeton	18	59	50	1		69	59	53	30	24	14	59	$50	8	$21
Calhoun																
Carroll	Mt. Carroll						7	40	18	7	18					
Cass	Virginia	12	51	27			3	33	11							
Champaign	Champaign	12	38	38	12	38	25	30	30	25	30	40	30	30	40	30
Christian																
Clark																
Clay	Flora	8	30	16	7	12	5	30	16	4	12	6	30	16	6	16
Clinton																
Coles	Charleston	25	91	80	15	27	33	91	84	33	84					
Cook																
Crawford	Robinson															
Cumberland	Toledo	1	57	6	1	6	14	67	45	14	45		57			
DeKalb	Sycamore	23	27	27	23	27	11	27	24	11	24					
DeWitt	Clinton	7	42	34	7	34	16	42	34	16	31					
DeWitt	Farmer City	11	67	42	3	16	39	67	67	17	15					
Douglas	Tuscola	3	42		3		5	36		5			25			
DuPage	Wheaton						3		11							
Edgar	Paris	34	123	99	34	99	51	123	123	37	72	17	123	35		
Edwards																
Effingham	Effingham	6	40	38	6	38	16	40	36	16	36	4	44	27	4	27
Fayette	Vandalia						27	25	6	27	6					
Ford																
Franklin	Benton	1	28	6	1	6	14	28	28	14	28					
Fulton	Canton	2	60	16	2	16	3	60	12	3	12	5	60	29		
Fulton	Avon						92	51	41			26	51	35		

Gallatin	Shawneetown	25	69	64	8	5	23	69	54	11	10	9	69	34	7	34
Greene	Carrollton															
Grundy																
Hamilton	McLeansboro	13	42	32	13	32	11	42	24	9	16					
Hancock	Carthage	58	96	92	29	48	85	96	96	50	60					
Hancock	Warsaw															
Hardin	Elizabethtown															
Henderson	Biggsville	6	42	29	6	29	19	42	37	19	37					
Henry	Cambridge						13	42	42	13	42	4	42	20	4	20
Iroquois																
Jackson	Murphysboro	5	27	14	5	14	8	27	27	8	27	4	27	12	4	12
Jackson	Carbondale	8	53	47			4	53	16	4	16	10	53	40		
Jasper	Newton	15	60	50	14	45	16	60	40	14	36					
Jefferson	Mt. Vernon	16	36	32	16	32	28	36	36	14	7					
Jersey	Jerseyville	26	60	60			21	60	60	2	10					
JoDaviess	Galena	20	42	32	20	32	20	42	32	20	32	6	42	16	6	16
JoDaviess	Warren						6	34	18							
Johnson																
Kane																
Kankakee	Kankakee	4					44					2				
Kendall	Yorkville	7	27	16			31	27	22			4	27	10		
Knox	Knoxville		50				40	50	50	40	50	15	50	50	15	50
Lake	Libertyville	5	23	10	5	10	5	23	9	5	9	2	23	3	2	3
Lake	Waukegan	1	45				12	45	26	12	26	8	45	29	8	29
LaSalle	Mendota	9	36	28	4	12	17	38	33			2	28	9	2	9
Lawrence																
Lee																
Livingston	Fairbury	9	40	24	7	7	32	73	73	25	55	10	40	36	10	36
Logan	Lincoln	13	39	39	2	4	32	39	39	26	36					
Logan	Atlanta	9	49	32			29	49	49			17	49	47		
Macon	Decatur	36	72	36	10	5	31	72	37	21	37	7	72	29		
Macoupin	Carlinville	19	58	54	19	54	28	58	55	28	55	13	58	45	13	45
Madison																
Marion	Salem	7					3					1				
Marshall	Wenona	14	42	42			103	42	42			13	42	42		
Mason	Havana															
Massac																
McDonough																
McHenry	Woodstock											20	32	27	20	27
McHenry	Marengo	11	33	23			26	33	37			10	30	16		
McLean	Bloomington	43	90	81	43	81	29	90	86	29	86	34	90	82	34	82
McLean	Bloomington						19	13	8	19	8	1	10	1	1	1
Menard																
Mercer	Aledo	24	75	71	24	71	55	75	75	55	75					
Monroe																
Montgomery	Hillsboro	7	23	23	7	23	7	23	23	7	23	6	23	13	6	13
Morgan	Jacksonville	21	48	46	15	22	20	48	45	9	12		48			
Moultrie																
Ogle	Rochelle	10	25	25	10	25	9	25	24	9	24	8	46	30	8	30
Peoria																
Perry	Pinckneyville	11	24	23	11	23	7	25	20	7	20					
Piatt	Monticello	10	30	30	10	30	40	30	30	40	39					

Report of Pure Bred tock—Continued.

COUNTIES.	Location of Fair.	BERKSHIRE SWINE.					POLAND CHINA.					CHESTER WHITE.				
		Number of entries	Amount premiums offered	Amount premiums paid	Owned in county.		Number of entries	Amount premiums offered	Amount premiums paid	Owned by county.		Number of entries	Amount premiums offered	Amount premiums paid	Owned in county.	
					No. of entries	Am'nt prem's paid				No. of entries	Am'nt prem's paid				No. of entries	Am'nt prem's paid
Pike	Pittsfield	7	$43	$21	7	$21	12	$43	$21	12	$21	10	$43	$21	10	$21
Pope	Golconda															
Pulaski																
Putnam																
Randolph	Sparta						5	24	9	5	9	2	24	5	2	5
Richland																
Rock Island	Hillsdale		40				10	40	29			4	40	9		
Rock Island	Port Byron	1	32	3	1	3	12	32	17	12	17					
Saline	Harrisburg															
Saline	ElDorado	8	28	24	8	24	8	28	24	8	24	2	28	8	2	8
Sangamon	Springfield	33	95		9		29	95		12						
Schuyler	Rushville	20	76	57	2		33	76	72	11	8					
Scott																
Shelby	Shelbyville	16	54	51	5	12	18	66	59	12	33					
Stark	Toulon	5	36				39	36	36	39	36	1	36			
Stark	Wyoming	6	32	24			29	32	29			2	32	10		
St. Clair	Belleville	7	60	27	7	27	21	60	54	21	54	4	60	24	4	24
Stephenson																
Tazewell	Delavan						50	48	48	24	14					
Tazewell	Mackinaw	5	10	6	5	6	31	10	10	31	10	11	10	8	11	8
Union	Anna	8	22	20	8	20	2	22	7	2	7		22			
Union	Jonesboro															
Vermilion	Hoopeston						64	74	74	34	42					
Vermilion	Catlin	17	44	33	17	33	11	36	28	11	28					
Vermilion	Danville	28	79	79	15	40	21	74	69	10	44					
Wabash																
Warren	Monmouth	19	105	95	19	95	52	105	105	52	105					
Washington																
Wayne																
White	Carmi	8	33	13	8	13	10	33	25	2	6	17	33	30	10	20
Whiteside	Sterling						66	61	61							

Whiteside	Morrison	7	29	26			15	29	29			13	29	29		
Whiteside	Albany.															
Will																
Williamson	Marion	7	37	22	7	22	8	37	25	8	25	4	37	13	4	13
Winnebago	Rockford						33	34	34	33	34	1	35	5	1	5
Woodford	El Paso	5	48	8	2	8	23	48	48	23	48		48			
Totals		883	$3,138	$2,140	518	$1,261	1,997	$3,598	$2,932	1,151	$1,890	389	$1,937	$975	242	$605

Report of Pure Bred Stock—Continued.

Counties.	Location of Fair.	Essex.					Small Yorkshire and Suffolk.					Short-Faced Yorkshire.					Duroc Jersey Red.					Other Distinct Breeds.				
		Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid
Adams	Camp Point																									
Alexander																										
Bond																										
Boone	Belvidere																2	$37	$8	2	$8					
Brown	Mt. Sterling																									
Bureau	Princeton	1	$59	$8													18	59	52	13	43					
Calhoun																										
Carroll	Mt. Carroll	1	40	6	1	$6											6	40	22	6	22					
Cass	Virginia																									
Champaign	Champaign																					2	$25	$4	2	$4
Christian																										
Clark																										
Clay	Flora																									
Clinton																										
Coles	Charleston						14	$91	$54	14	$54						11	91	29	11	29					
Cook																										
Crawford	Robinson																									
Cumberland	Toledo		57														1	57	2	1	2		57			
DeKalb	Sycamore																4	27	10	4	10					
DeWitt	Clinton																									
DeWitt	Farmer City																14	42	28	11	19					
Douglas	Tuscola																									
DuPage	Wheaton	3		5																						
Edgar	Paris																									
Edwards																										
Effingham	Effingham						6	54	40	6	40		$178	$141		$141										
Fayette	Vandalia																									
Ford																										
Franklin	Benton																4	28	12							
Fulton	Canton																									

Fulton	Avon																8	51	16							
Gallatin	Shawneetown																11	69	34	5	15					
Greene	Carrollton																									
Grundy																										
Hamilton	McLeansboro																6	42	14	6	14					
Hancock	Carthage																41	96	92	12	30	51	96	92	25	40
Hancock	Warsaw																									
Hardin	Elizabethtown																									
Henderson	Biggsville																5	42	23	5	23					
Henry	Cambridge																3	42	15	3	15					
Iroquois																										
Jackson	Murphysboro																6	27	21	6	21					
Jackson	Carbondale																									
Jasper	Newton																1	60	5	1	5		60			
Jefferson	Mt. Vernon																									
Jersey	Jerseyville																									
JoDaviess	Galena																									
JoDaviess	Warren																									
Johnson																										
Kane																										
Kankakee	Kankakee																									
Kendall	Yorkville		27																							
Knox	Knoxville																									
Lake	Libertyville						11	23	19	11	19															
Lake	Waukegan		45				14	45	45	14	45															
LaSalle	Mendota	5	27	16	5	16											6	26	16	2	3					
Lawrence																										
Lee																										
Livingston	Fairbury																					16	11	11	25	11
Logan	Lincoln																17	39	36	11	24	14	39	24	11	9
Logan	Atlanta																					12	49	39		
Macon	Decatur																5	72	18			16	40	27	4	14
Macoupin	Carlinville																									
Madison																										
Marion	Salem																3									
Marshall	Wenona																7	42	38							
Mason	Havana																									
Massac																										
McDonough																										
McHenry	Woodstock	10	32	12	10	12											45	32	22	25	11					
McHenry	Marengo																10	30	20							
McLean	Bloomington																									
McLean	Bloomington																7	3	3	1	3					
Menard																										
Mercer	Aledo																9	75	54	9	54					
Monroe																										
Montgomery	Hillsboro																					5	23	23	5	23
Morgan	Jacksonville	12	48	43	12	43																				
Moultrie																										
Ogle	Rochelle																					34	66	20	34	20
Peoria																										
Perry	Pinckneyville						3	15	6								4	15	12	4	12					

Report of Pure Bred Stock—Continued.

COUNTIES.	Location of Fair.	ESSEX.					SMALL YORKSHIRE AND SUFFOLK.					SHORT-FACED YORKSHIRE.					DUROC JERSEY RED.					OTHER DISTINCT BREEDS.				
		Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid	Number of entries	Amount of premiums offered	Amount of premiums paid	Owned in county. Number of entries	Owned in county. Amount of premiums paid
Platt	Monticello																6	$30	$30	6	$30					
Pike	Pittsfield																19	43	21	19	21					
Pope	Golconda																									
Pulaski																										
Putnam																										
Randolph	Sparta																3	24	10	3	10					
Richland																										
Rock Island	Hillsdale		$40														2	40	4							
Rock Island	Port Byron																6	32	8							
Saline	Harrisburg																									
Saline	ElDorado																	28								
Sangamon	Springfield																									
Schuyler	Rushville																	76								
Scott																										
Shelby	Shelbyville																									
Stark	Toulon	5	36	$23	5	$23											13	36	32	13	32					
Stark	Wyoming																									
St. Clair	Belleville		60				21	$60	$40	21	$40						7	60	30	7	30		$34			
Stephenson																										
Tazewell	Delavan																12	40	40	12	40					
Tazewell	Mackinaw																	10				11	10	$6	11	$6
Union	Anna		22				1	22	5	1	5															
Union	Jonesboro																									
Vermilion	Hoopeston																12	74	74	12	74					
Vermilion	Catlin																									
Vermilion	Danville																									
Wabash																										
Warren	Monmouth																19	105	100	19	100					
Washington																										
Wayne																										

White	Carmi						2	33	4	2	4															
Whiteside	Sterling						28	54	50																	
Whiteside	Morrison																2	29	10							
Whiteside	Albany																									
Will																										
Williamson	Marion																3	37	10	3	10					
Winnebago	Rockford																8	36	22	8	22					
Woodford	El Paso		48					48									3	48	6	3	6					
Totals		37	$541	$113	33	$100	100	$445	$263	69	$207	....	$178	$141	....	$141	369	$1,886	$999	243	$738	161	$510	$246	117	$127

HANCOCK COUNTY—WARSAW.

OFFICERS.—President, Isaac Bliss, Warsaw; Secretary, Jas. T. Johnson, Warsaw; Treasurer, Jas. B. Dodge, Warsaw.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		$126 83
" received in 1884, fees (gate and entrance)		1,452 15
" booth rents and permits		140 00
" received 1884, sale shares stock		
" received 1884, State appropriation		100 00
" received 1884, other sources		96 27
" paid 1884, in premiums	$1,417 25	
" paid 1884, for real estate, buildings and improvements	567 00	
" paid 1884, for current expenses other than premiums	271 00	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit the current year		340 00
Totals	$2,255 25	$2,255 25

RICHLAND COUNTY.

OFFICERS.—President, S. M. Thomson, Parkersburg; Secretary, W. F. Beck, Olney; Treasurer, Arch. Spring, Olney.

FINANCIAL EXHIBIT FOR 1884.

Amount in treasury last report		
" received in 1884, fees (gate and entrance)		$1,439 55
" booth rents and permits		235 50
" received 1884, sale shares stock		
" received 1884, State appropriation		
" received 1884, other sources		496 35
" paid 1884, in premiums	$1,718 91	
" paid 1884, for real estate, buildings and improvements		
" paid 1884, for current expenses other than premiums	452 49	
" paid 1884, on previous indebtedness		
" remaining in the treasury		
" deficit the current year		
Totals	$2,171 40	$2,171 40

MINUTES OF MEETINGS HELD DURING THE SEVENTH ANNUAL AMERICAN FAT-STOCK SHOW.

EXPOSITION BUILDING,
CHICAGO, November 12, 1884.

WEDNESDAY—10 O'CLOCK A. M.

The Board met in special session on the call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Reynolds, Griffith, Dysart, Virgin, Vittum, Judy, Funk, Chester, Gore and Gillham.

The following protest was read:

PROTEST.

To the State Board of Agriculture:

The undersigned exhibitors hereby protest against the eligibility of the following named steers to compete in the rings as advertised in the official catalogue of the Seventh Annual American Fat-Stock Show.

The cattle in question are not correctly entered according to their ages as shown by the most reliable evidence, namely, their teeth.

The names of the cattle and their reported ages are as follows:

Stall.	Lot.	Name of Steer.	Reported Age, in days.	Owner.
178	11	Hutcheon	989	J. J. Hill, St. Paul, Minn ....
183	4	Angus	658	J. J. Hill, St. Paul, Minn ....

H. C. Burleigh, Indianapolis, Ind.; C. M. Culbertson, Chicago; L. H. Ross, Bucyrus, Ohio; J. R. Anderson, Anderson, O.; J. P. Gillett, Elkhart, Ill.; Morrow & Renick, Clintonville, Ky.; J. R. Price, Williamsville, Ill.; Fowler & Van Natta, Fowler, Ind.; J. R. Peck & Son, Winchester, Ill.; Harvey Sadowsky, Indianola, Ill.; C. S. Barclay, West Liberty, Iowa; B. Waddell, Marion, Ohio; James A. Cochrane, Compton, Quebec; J. H. Potts & Son, Jacksonville,

Motion of Mr. Reynolds adopted,

That the protest be considered immediately after the reading of the report of the Committee on Ages.

The committee appointed to examine the cattle on exhibition as to age, made the following report:

REPORT OF THE COMMITTEE ON AGES.

CHICAGO, ILL., November 11, 1884.

To the State Board of Agriculture:

The undersigned, committee to whom was referred the examination as to age of the cattle entered for exhibition, beg leave to report that the teeth of all the competing animals have been examined by the committee, and that the apparent ages as reported by the owners are correct, with the following exceptions, in which cases the mouths of the animals indicate a greater age than reported, viz:

Exhibitor.	Name Steer.	Age.
J. B. Sherman, Chicago	J. C. Bone	2 and under 3 years
C. S. Barclay, West Liberty, Iowa	Cambria Boy 2d	3 and under 4 years
J. J. Hill, St. Paul, Minn.	Benholm	1 and under 2 years
C. S. Barclay, West Liberty, Iowa	Thompson	2 and under 3 years
J. B. Sherman, Chicago	Barney	2 and under 3 years
J. B. Sherman, Chicago	Richland	2 and under 3 years

It is recommended before action is taken that the statements of the owners of the cattle named above be heard.

The committee desire to call attention to a very peculiar mouth in a steer named Orio, exhibited by B. Waddell, of Marion, Ohio, and entered as one and under two years old.

The mouth of this steer showed one perfect side and was entirely minus teeth on the other.

Respectfully submitted,

W. A. WOODROFFE, V. S.
J. H. PICKRELL,
J. L. MOORE.

The consideration of the protest was resumed.

Motion of Mr. Gillham adopted,

That the protest so far as relates to the steer Hutcheon, entered by J. J. Hill, of St. Paul, Minn., be declared not sustained.

Motion of Mr. Reynolds adopted,

That Mr. Hill be requested to furnished evidence as to the age of the protested steer named Angus, and that further action on the protest be temporarily postponed.

Motion of Mr. Gillham adopted,

That the report of the committee on ages be received and placed on file, and that the Superintendent of Class A, Cattle, make further inquiry of the exhibitors concerning the animals showing unusual development of teeth for age, and if the investigation is satisfactory that all except the protested steer Angus be permitted to compete in the rings where entered.

Mr. Harvey Sadowsky, of Indianola, Ill., stated that owing to a misunderstanding as to the date of closing entries, he had not complied with the published rules, and requested that he be permitted to show certain animals now in the Exposition building. Mr. Sadowsky presented the following statement signed by all exhibitors having competing animals:

CHICAGO, November 11, 1884.

To the State Board of Agriculture:

The undersigned are perfectly willing that Mr. Harvey Sadowsky, should enter and show his five yearling steers in the different classes.

John R. Harvey, Turlington, Neb.; Morrow & Renick, Clintonville, Ky.; C. M. Culbertson, Chicago; H. C. Burleigh, Indianapolis, Ind.; T. W. Harvey, Chicago, and J. H. Potts & Son, Jacksonville, Ill.

Motion of Mr. Virgin adopted,

That Mr. Harvey Sadowsky be permitted to make entries and exhibit his cattle, he having failed to make his entries prior to November 1.

Mr. Gore, Superintendent Class D, Swine, called attention to similar cases, and moved that J. A. Countryman, of Rochelle, Ill., and John Gallaher, of Floyd, Ill., be permitted to make their entries. Adopted.

The Board proceeded to personally examine the qualification of judges selected to pass upon the stock on exhibition, and the following butchers were approved as having the experience and necessary qualifications to make impartial and correct awards:

Peter Emrich	Evansville	Ind.
John S. Messler	Canton	Ill.
Christian Rohm	East St. Louis	Ill.
W. S. Stebbins	Iowa City	Iowa.
Leo Phillips	Mt. Carroll	Ill.
Balser Scheiss	Alton	Ill.
O. B. Jenkins	Gallatin	Tenn.
Charles E. Bunn	Peoria	Ill.
John H. Bunn	Peoria	Ill.
Joseph Krischke	Canton	Ill.

On motion of Mr. Reynolds, the following committee on measurements was appointed:

COMMITTEE ON MEASUREMENTS.

LaFayette Funk	Shirley	Ill.
S. B. Gillham	Alton	Ill.
A. F. Moore	Polo	Ill.

Motion of Mr. Chester adopted,

That the Superintendents be authorized to select as needed, committeemen from the judges approved by the Board.

On motion of Mr. Dysart,

The Board adjourned subject to the call of the President.

JOHN LANDRIGAN, *President.*

S. D. Fisher, *Secretary.*

Sherman House,
Chicago, November 13, 1884.

Thursday, 2 O'Clock P. M.

The Board met in special session on the call of the President.

Present—President Landrigan, Vice-Presidents Pearce, Reynolds, Griffith, Dysart, Funk, Virgin, Chester, David, Lewis, Skeavington, and Washburn.

The following petition was read:

CHICAGO, ILL., November 13, 1884.

To the Illinois State Board of Agriculture:

The undersigned, breeders and exhibitors of cattle at your Fat-Stock Show, respectfully request that the requirement of the Board compelling the slaughter of sweepstakes winners in classes be so changed as to exempt animals two years old and under from the said requirements. That many of the undersigned have prepared exhibits for showing at the World's Fair at New Orleans, and, if compelled to slaughter at this Show, will greatly inconvenience the said purpose, and in some cases will prevent it entirely.

We also respectfully submit that the killing of the "plums" at such ages will work an injustice to the breeder who exhibits at future Shows, and will greatly detract from the success of future shows at Chicago. Morrow & Renick, H. C. Burleigh, John. R. Harvey, J. H. Potts & Son, T. S. Moberly, W. C. Van Meter, O. H. Chenouth, D. A. C. Senaulk, D. R. Shaw, J. R. Price, George Morgan, B. Hershey, G. S. Burleigh, Charles Gudgell, C. M. Culbertson, W. T. Pogue, J. F. Holt, Harvey Sadowsky, Geary Bros., A. H. Bullis, T. W. Harvey, C. K. Parmlee, Fowler & Van Natta, John Hope, J. P. Gillett, T. C. Anderson, Peleg Winslow, M. W. Gleason, M. H. Phillips, D. M. Moninger, J. D. Brown, S. F. Newell, Robert Mitchell, C. D. Hudson, Clifton Oxman, John P. Anderson, James Hawkins, George Findlay, J. N. Brown's Sons, C. W. Cook, James A. Cochrane, Adams Earl, J. R. Anderson, W. H. Clough, O. Bush, Wm. Esson, J. R. Peak, L. H. Ross, T. C. Larague, Samuel Esson, T. Esson, J. H. Brill, John V. Hadley, F. H. Johnson, Thomas Clark, Henry E. Yeomans, G. W. Milliken, Wm. Creed, T. P. D. Camp, Henry M. Winslow, C. Esson, Stone & Loake, George Allen & Son, J. H. Pickrell, R. E. Edmonson.

Motion of Mr. Reynolds adopted,

That the consideration of the petition be temporarily postponed.

Motion of Mr. Reynolds adopted,

That 9 o'clock A. M., November 14, be appointed as the time for the consideration of the protest filed against the elegibility of the steer Angus, exhibited by J. J. Hill, of St. Paul, Minn.

Mr. Funk moved,

That "free martens" be allowed to compete with steers of same age and breeding.

Mr. Reynolds moved, as an amendment,

That the exhibitors of "free martens" be allowed to enter such stock for exhibition, provided the consent of competitors is obtained in writing and presented to the Secretary at time of making entry.

Amendment adopted, and the motion as amended adopted.

On motion of Mr. Dysart,

The Board adjourned subject to the call of the President.

EXPOSITION BUILDING,
CHICAGO, November 14, 1884.

FRIDAY, 9 O'CLOCK A. M.

Board met in special session on the call of the President.

Present—President Landrigan, Vice-Presidents Pearce, Reynolds, Griffith, Dysart, Funk, Virgin, Chester, David, Lewis, Gillham, Skeavington and Washburn.

The President stated the special order of business was the consideration of the protest filed against the eligibility of the steer Angus, entered by J. J. Hill, of St. Paul, Minn.

Mr. Dolby, manager for Mr. Hill, was invited to appear before the Board, and presented a certificate of breeding of an unnamed animal said to represent the animal in question.

Motion of Mr. Gillham adopted,

That there being no evidence that would identify the steer Angus as being the unnamed animal described in the pedigree presented by Mr. Dolby, that further time be granted Mr. Hill to obtain evidence to establish the identity of the steer in question.

On motion of Mr. Funk,

The Board adjourned subject to the call of the President.

Exposition Building,
Chicago, November 14, 1884.

Friday, 7:30 O'Clock P. M.

Board met in special session on the call of the President.

Present: President Landrigan, Vice-Presidents Gillham, Rush, Griffith, Gore, Chester, Vittum, Funk, Virgin, Dysart, David.

Motion of Mr. Gillham adopted,

That the President appoint delegates to attend the Cattle Convention called to meet at St. Louis, Mo., November 17–22, 1884.

The President appointed as said delegates, Messrs. Gillham, Rush, Griffith and Gore of the Board, and Hon. W. H. Fulkerson, of Jerseyville, Ill.

The following communication from the Executive Committee of the International Association of Fairs and Expositions was read.

St. Louis, Mo., August 16th, 1884.

To the President and Board of Directors of the State, Provincial, District and County Fair and Exposition Associations, in the United States and Canada:

Gentlemen: At the Convention of the International Association of Fairs and Expositions, held in the City of St. Louis, Mo., U. S. A., June 3d and 4th, 1884, it was duly organized in manner and form as set forth in the report of the proceedings, a copy of which we mail to you, and the undersigned Executive Committee were appointed to address you in order to obtain your membership and co-operation

Each Fair and Exposition has its local interests of various kinds to subserve, and when that is done it has accomplished in the main the great desideratum for which it was created, and there is nothing more it can do to enchance the values of local interests.

To do this in the best most economic and satisfactory manner is the object of this Association.

We are aware that some societies are small and comparatively weak, and others are large and strong. In this Association we propose to give the weaker the benefit of the experience and the plans of operating of the larger and more prosperous organizations. We believe that we can in no better or surer manner enchance the value of all our common interests, and the interests we individually subserve, than by imparting to one another in convention assembled the results of our experience, in order that we may adopt that which is profitable and discard features which have been found disadvantageous and impracticable.

Fairs and Expositions of the United States and Canada are not dissimilar. We have been interchanging courtesies these many years and in many respects our exhibitions are conducted alike. It is apparent to Fair and Exposition Managers and Directors that there should be, as near as possible, a uniform method in making entries, awarding premiums, tickets of admission, etc., etc. This Association will bring about that result.

The annual meetings or conventions will be held in any part of Canada or the United States, the time and place to be named by the Association, thus enabling member to cultivate personal social relations.

The membership fee is $10, and the annual dues are $10, so that $20 will admit any Society to membership and pay its dues for one year. These amounts are fixed at the very lowest sum commensurate with safety in meeting the annual current expenses of our conventions.

If you decide on membership, please fill out the enclosed blank and forward the same with draft or post-office order on St. Louis for $20, which will pay membership fee and annual dues for one year, and will also entitle you to delegated representation in accorddance with our Constitution (submited herewith).

Send blank and draft or post-office order to Festus J. Wade, Recording Secretary International Fair and Exposition Association, No. 718 Chestnut Street, St. Louis, Mo., U. S. A., on receipt of which Mr. Wade will acknowledge the same by mail, and you will be duly enrolled and a Certificate of Membership forwarded to your Society.

Blanks will be forwarded you at the proper time upon which to return the names of your delegates to our Convention—December 3d, 1884, at St. Louis, Mo., U. S. A.

Hoping that you will join us, and that much good may be accomplished, we are, in any event,

Very respectfully, etc.,

JULIUS S. WALSH, St. Louis, Mo.
President and Ex-Officio Chairman.
DAVID E. BEATY, Jerseyville, Ill.
EDWARD HAREN, Kansas City, Mo.
J. G. J. CAMPBELL, Milwaukee, Wis.
DANIEL B. GILLHAM, Upper Alton, Ill.
ALEX HERON, Indianapolis Ind.
Executive Committee.

ATTEST:

MORRIS R. LOCKE, *Corresponding Secretary.*
FESTUS J. WADE, *Recording Secretary.*

Motion of Mr. Chester adopted,

That the Secretary forward to the proper officer the necessary fee of twenty dollars to constitute the Board a member of the International Association of Fairs and Expositions.

Motion of Mr. Vittum adopted,

That the President appoint delegates to attend the Convention of the International Association of Fairs and Expositions, to be held in St Louis, December 3, 1884, and that the President be made the chairman of the delegation.

The President appointed the following delegates: Messrs. Vittum, Gillham, Dysart, Funk and Virgin.

Motion of Mr. Rush adopted,

That a committee of five be appointed to make necessary arrangements for the attendance of the members of the Board at the World's Exposition, at New Orleans, La.

The President appointed as said committee, Messrs. Rush, David, Skeavington, Vittum and Fisher.

On motion of Mr. Virgin,

The Board adjourned to meet on the call of the President.

SHERMAN HOUSE,
CHICAGO, November 15, 1884.

SATURDAY, 8 O'CLOCK P. M.

Board met in special session on the call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Reynolds, Dysart, Lewis, Virgin, David, Rush, Funk, Gillham, Skeavington and Washburn.

Motion of Mr. Virgin adopted,

That a committee of three be appointed for the purpose of drafting resolutions expressive of the sentiments of the Board in reference to the re-appointment of Hon. E. C. Lewis as a member of the Railroad and Warehouse Commission.

The President appointed as said committee, Messrs. Virgin, Washburn and Reynolds.

Motion of Mr. Reynolds adopted,

That the President be added to the committee and made chairman.

On motion of Mr. Dysart,

The Board adjourned subject to the call of the President.

SHERMAN HOUSE,
CHICAGO, November 17, 1884.

MONDAY, 10 O'CLOCK A. M.

Board met on call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Reynolds, Griffith, Dysart, Virgin, David, Funk, Gore, Gillham and Skeavington.

Motion of Mr. Dysart adopted,

That a committee of three be appointed to obtain from the Board of Health, of the city of Chicago, a permit to slaughter in the Exposition Building, stock competing for the carcass prizes.

The President appointed as said committee, Messrs. Dysart, Gillham and Funk.

On motion of Mr. Pearce,

The Board adjourned subject to the call of the President.

SHERMAN HOUSE,
CHICAGO, November 19, 1884.

WEDNESDAY, 8 O'CLOCK P. M.

Board met on the call of the President.

Present: President Landrigan, Vice-Presidents Pearce, Reynolds, Griffith, Virgin, Vittum, Funk, Chester, Gore, Pullen and Skeavington.

The committee appointed to draft resolution in reference to the re-appointment of Hon. E. C. Lewis as a member of the Railroad and Warehouse Commission, submitted the following, which was adopted on motion of Mr. Chester:

Resolved, That knowing Hon. E. C. Lewis intimately and well, personally, and as interested citizens of this State, having observed his official acts as one of the members of the Board of Railroad and Warehouse Commissioners, and believing that the Agricultural and Live Stock interests of the State should be represented on said Board, we hereby express our unanimous desire as members of the Illinois State Board of Agriculture for his re-appointment by the Governor.

A communication from J. M. Minton, of Wapella, Ill., was read asking the return of entry and pen fees paid on stock not exhibited at the Fat-Stock Show by reason of sickness.

Motion of Mr. Virgin adopted,
That the communication be referred to Mr. Gore, Superintendent Class D, Swine.

On motion of Mr. Funk,
The Board adjourned subject to the call of the President.

JOHN LANDRIGAN,
President.

S. D. FISHER,
Secretary.

SECRETARY'S REPORT.

The results of the seven Fat-Stock Shows are briefly given herewith, for convenience of ready reference, and to enable the reader to critically examine and compare the different rings of the various breeds of stock exhibited at these shows.

The pure breeds and crosses will be reported upon in the order they appear in the classification of premiums.

The averages of the rings, of the several ages of animals and breeds, for the seven years, are first given, followed by table giving age, weight and gain of the first premium animals exhibited therein each year.

The excellent results obtained by feeders of the animals exhibited at former shows have been improved upon, in several rings, by the stock exhibited in 1884.

The increasing interest in the matter of early maturity has not diverted the attention of feeders from the essential matter of extra quality, which has and always will influence the awards of committees. The question of early maturity, other essential qualities being equal, will doubtless influence the award in favor of the animal making the largest average gain per day since birth.

In compiling the following statistics, it has been the purpose of the writer simply to give the official figures, without comment, leaving the reader free to draw his own inference as to the merits of the respective meat breeds of animals exhibited.

The superior quality of butchers' stock exhibited at the Seventh Annual Fat-Stock Show has not been surpassed by the same number of animals previously exhibited.

The matter of extra quality is deservedly attracting more attention at each succeeding show, and the fine finish, excellent handling quality, fineness of bone, and other evidences of light offal, and cutting a large proportion of net to gross, was noticeable in the stock awarded premiums at the late Show.

CLASS A—CATTLE.

SHORT-HORNS.

Short-Horn Steer 4 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	2	1,891	2,262	1.19
1879	5	1,861	2,358	1.28

First Premium Animals—4 years old or over.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	VanMeter & Hamilton	Young Mary ste'r	1,880	2,085	1.11
1879	Wing & Thompson	Wm. Allen	1,578	2,240	1.42

Short-Horn Steer, Barren or Spayed Cow, 3 and under 4 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	2	1,250	2,087	1.67
1879	2	1,326	2,039	1.53
1880	4	1,300	2,172	1.66
1881	3	1,364	2,093	1.53
1882	5	1,339	2,141	1.59
1883	3	1,344	1,955	1.46
1884	9	1,262	1,981	1.57

First Premium Animals—3 and under 4 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	VanMeter & Hamilton	Young Mary ste'r	1,280	2,115	1.65
*1879	J. H. Graves	Nichols	1,335	2,060	1.54
1880	William Sandusky	Vermillion	1,367	2,350	1.71
1881	J. B. Sherman	Morris	1,309	2,150	1.64
1882	H. & I. Goff	King of the West.	1,305	2,535	1.94
1883	J. B. Sherman	William S	1,306	1,970	1.51
1884	Can. W. F. Stock Ass'n	Clarence Kirklevington	1,372	2,400	1.74

Short-Horn Steer or Spayed Heifer, 2 and under 3 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	5	934	1,621	1.73
1879	3	871	1,624	1.86
1880	5	942	1,801	1.92
1881	7	963	1,684	1.69
1882				
1883	3	868	1,765	2.02
1884	11	971	1,738	1.79

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*Nichols, exhibited by J. H. Graves, was subsequently proved to be a grade Short-Horn.

First Premium Animals—2 and under 3 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	H. C. Nelson	Cash	969	1,705	1.76
1879	J. N. Brown's Sons	John Clay, Jr.	845	1,636	1.93
1880	J. B. Sherman	Boynton	1,064	1,815	1.70
1881	Morrow & Muir	Muir	1,085	1,895	1 74
1882		levington.			
1883	Canada W. Farm Ass'n	Clarence Kirk-	1,009	2,045	2.02
1884	Morrow & Renick	Bedford No. 1	1,038	1,708	1.64

Short-Horn Steer or Spayed Heifer, 1 and under 2 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	3	672	1,385	2 06
1879	5	658	1,267	2.00
1880	1	721	1,590	2.20
1881				
1882	3	480	1,288	2.72
1883	9	647	1,222	1.92
1884	9	592	1,261	2.13

First Premium Animals—1 and under 2 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	J. N. Brown's Sons	Duke Sangamon.	650	1,480	2.28
1879	" "	Gaylord	701	1,316	1.87
1880	J. S. Highmore	Corporal	721	1,590	2.20
1881		levington.			
1882	Canada W. Farm Ass'n	Clarence Kirk-	645	1,620	2 51
1883	Morrow & Renick	Schooler	698	1,300	1.85
1884	" "	Swift	625	1,370	2.19

Short-Horn Cow 3 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	6	2,937	1,722	0.72
1879	8	2,364	1,786	0.81
1880	3	3,031	1,618	0.59
1881	4	2,109	1,756	0.83
1882	8	2,106	1,808	0.85
1883	6	2,635	1,797	0.71

First Premium Animals—Cow 3 years old or over.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	Baugh & Son	Superior	1,721	2,075	1.20
1879	R. K. & A. S. Brownlee	Red Bettie	2,035	1,769	0.86
1880	W. Scott	orest Queen 2d.	2,136	1,710	0.80
1881	Canada W. Farm St'k Ass'n.	Lady Aberdeen	1,873	1,875	1.00
1882	J. H. Potts & Son	Acorn 6th.	1,404	1,865	1.32
1883	C. S. Barclay	4th Rose of Ashbrook	2,047	1,895	0.92

HEREFORDS.

Hereford Steer 4 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	1	2,692	2,010	0.75
1879	4	1,639	1,994	1.28

First Premium Animal—4 years old or over.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight,	Average gain per day in lbs. since birth.
1878	T. L. Miller	Hereford	2,692	2,010	0.75
1879	" "	John	1,677	2,043	1.22

Hereford Steer, Barren or Spayed Cow, 3 and under 4 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	3	1,346	1,735	1.26
1879	2	1,389	1,973	1.41
1880	1	1,183	1,875	1.58
1881	2	1,233	1,947	1.57
1882	1	1,121	1,765	1.57
1883	4	1,315	1,952	1.48
1884	2	1,381	1,817	1.31

First Premium Animals—3 and under 4 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	T. L. Miller	No. 20	1,336	1,705	1.20
1879	"	Merryman	1,359	1,968	1.44
1880	"	Alex	1,183	1,875	1.58
1881	"	Will	1,224	1,965	1.60
1882	M. H. Cochrane	Sir Richard	1,121	1,765	1.57
1883	Adams Earl	Wabash	1,441	2,350	1.63
1884	Fowler & Van Natta	Artless	1,374	1,560	1.13

Hereford Steer or Spayed Heifer, 2 and under 3 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs since birth.
1878	1	1,080	1,470	1.36
1879	1	939	1,474	1.57
1880	3	943	1,738	1.85
1881	....	....	....	....
1882	3	954	1,626	1.70
1883	4	1,041	1,539	1.47
1884	8	1,056	1,405	1.33

First Premium Animals—2 and under 3 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	T. L. Miller	No. 23	1,080	1,470	1.36
1879	"	Alex	939	1,474	1.57
1880	"	Will	866	1,650	1.91
1881					
1882	Earl & Stuart	Wabash	1,077	1,940	1.80
1883	A. A. Crane & Son	My Maryland	1,061	1,715	1.61
1884	Indiana Blooded Stock Co.	Prince	996	1,860	1.86

Hereford Steer or Spayed Heifer, 1 and under 2 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878				
1879	3	577	1,230	2.15
1880	1	710	1,115	1.57
1881				
1882	1	697	1,330	1.90
1883	7	610	1,132	1.85
1884	4	682	1,287	1.89

First Premium Animals—1 and under 2 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878					
1879	T. L. Miller	General	712	1,397	1 96
1880	G. S. Burleigh	Advance	710	1,115	1.57
1881					
1882	A. A. Crane & Son	My Maryland	697	1,330	1.90
1883	C. M. Culbertson	Choctaw	714	1,460	2.04
1884	Indiana Blooded Stock Co.	Rosy Duke	655	1,250	1.81

Hereford Cow, 3 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	3	2,179	1,630	0.78
1879	2	3,663	1,615	0.56
1880	5	1,350	1,720	1.27
1881	3	1,782	1,435	0 82
1882	5	2,880	1,672	0.65
1883	2	1,976	1,676	0.96

First Premium Animals—3 years old or over.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	T. L. Miller	Jennie	1,677	1,595	0.95
1879	" "	Jennie	2,018	1,730	0 85
1880	" "	Maid of Orleans.	1,350	1,720	1.27
1881	" "	Maid of Mist	2,243	1,560	0 69
1882	" "	Princess Alice	3,943	1,800	0 45
1883	C. M. Culbertson	Kathleen..[Maud	1,347	1,710	1.27

DEVONS.

Devon Steer, 4 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	2	655	1,757	1.06
1879				

First Premium Animals—4 years old or over.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	Sanford Saun	May Boy	1,658	1,645	0.99
1879					

Devon Steer, Barren or Spayed Cow, 3 and under 4 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	2	1,319	1,565	1.18
1879	1	1,335	1,509	1.12
1880	2	1,330	1,220	0.93
1881	2	1,298	1,152	0.88
1882				
1883				
1884				

First Premium Animals—3 and under 4 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	Thos. Bidwell	Postman	1,371	1,655	1.21
1879	L. F. Ross	Buck	1,335	1,509	1.12
1880	Thos. Bidwell	Major	1,335	1,270	0.97
1881	L. Rawson	Broad	1,268	1,075	0.84
1882					
1883					
1884					

Devon Steer 2 and under 3 years.

Year.	Entries.	Average age in days	Weight.	Average gain per day in lbs. since birth.
1878				
1879				
1880	1	849	1,250	1.46
1881	3	926	977	1.05
1882				
1883				
1884				

First Premium Animals—2 and under 3 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878					
1879					
1880	L. F. Ross	Honest Tom	849	1,250	1.46
1881	L. Rawson	Jerry	969	975	1.00
1882					
1883					
1884					

Devon Steer or Spayed Heifer, 1 and under 2 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878				
1879	1	483	844	1.74
1880				
1881	3	609	792	1.30
1882				
1883				
1884				

First premium Animals—1 and under 2 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878					
1879	L. F. Ross	Honest Tom	483	844	1.74
1880					
1881	L. Rawson	Jim	614	835	1.36
1882					
1883					
1884					

Devon Cow, 3 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	1	1,905	1,200	0.63
1879	2	2,475	1,115	0.51
1880				
1881				
1882				
1883				

First Premium Animals—3 years old or over.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878*					
1879	L. F. Ross	Marilla	3,490	1,264	0.36
1880					
1881					
1882					
1883					

* No premium awarded in 1878.

ABERDEEN ANGUS.

Steer, Barren or Spayed Cow, 3 and under 4 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1883	1	1,380	2,355	1.70
1884	1	1,404	1,890	1.35

First Premium Animal—3 and under 4 years.

Year..	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1883	Geary Bros	Black Prince....	1,380	2,355	1.70
1884	M. H. Cochrane	Netherwo'd Jock	1,404	1,890	1.35

Aberdeen-Angus Steer or Spayed Heifer, 2 and under 3 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1883	1	999	1,815	1.82
1884	....	....	....	....

First Premium Animal—2 and under 3 years.

Year..	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1883	M. H. Cochrane	Waterside Jock..	999	1,815	1.82
1884	....	....	....	....	....

Aberdeen-Angus Steer or Spayed Heifer, 1 and under 2 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1884	4	525	1,248	2.38

First Premium Animals—1 and under 2 years.

Year..	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1883	....	....	....	....	....
1884	T. W. Harvey	Paris Favorite...	634	1,316	2.07

Aberdeen-Angus Cow, 3 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1883	3	2,698	1,703	0.70

First Premium Animal—3 years old or over.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1883	M. H. Cochrane	Duchess 2d	1,770	1,820	1.03

HOLSTEIN OR FRESIAN.

Holstein Steer or Barren or Spayed Cow 3 and under 4 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1884	1	1,338	1,450	1.08

First Premium Animals—3 and under 4 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
*1884					

* No first premium awarded.

Holstein Steer or Spayed Heifer, 2 and under 3 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1884	1	1,048	1,800	1.72

First Premium Animals—2 and under 3 years.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
*1884					

* No first premium awarded.

GRADES OR CROSSES.

Steer 4 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	12	1,815	2,491	1.37
1879	17	1,923	2,373	1.25

1878—11 Grade Short-Horns; 1 Grade Hereford.
1879—15 Grade Short-Horns; 1 Grade Hereford; 1 Grade Devon.

First Premium Animals—4 years old or over.

Year	Exhibitor.	Name of Animal.	Breed.	Age in days.	Weight	Av. gain per days in lbs. since birth.
1878	D. M. Moninger	Horace Greeley	Grade Short-Horn	2,058	2,480	1.20
1879	T. L. Miller	Ben	Grade Hereford	1,780	2,134	1.19

Steer, Barren or Spayed Cow, 3 and under 4 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	10	1,296	2,032	1.56
1879	29	1,262	1,946	1.18
1880	18	1,267	1,924	1.54
1881	34	1,259	1,943	1.54
1882	24	1,261	2,034	1.61
1883	16	1,302	2,152	1.61
1884	22	1,286	2,071	1.61

1878—9 Grade Short-Horns; 1 Grade Hereford.
1879—20 Grade Short-Horns; 7 Grade Herefords; 2 Grade Devons.
1880—16 Grade Short-Horns; 2 Grade Herefords.
1881—29 Grade Short-Horns; 5 Grade Herefords.
1882—17 Grade Short-Horns; 7 Grade Herefords.
1883—12 Grade Short-Horns; 4 Grade Herefords.
1884—16 Grade Short-Horns; 4 Grade Herefords; 2 Hereford-Short-Horns.

First Premium Animals—3 and under 4 years.

Year	Exhibitor.	Name of Animal.	Breed.	Age in days.	Weight	Av. gain per days in lbs. since birth.
1878	J. D. Gillett	John Sherman	Grade Short-Horn	1.328	2,185	1.65
1879	J. W. Hunt	Thad. Stevens	" "	1,294	1,986	1.53
1880	J. H. Graves	Morrow	" "	1,411	2.030	1.44
1881	T. L. Miller	Conquerer	Grade Hereford	1,190	2.145	1.80
1882	D. M. Moninger	Tom Brown	Grade Short-Horn	1,174	1,945	1.65
1883	C. M. Culbertson	Roan Boy	Grade Hereford	1,415	2.125	1 50
1884	Jno. Ross & Son	Charley Ross	Grade Short-Horn	1,250	2,265	1.81

Steer or Spayed Heifer, 2 and under 3 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	13	935	1,651	1.73
1879	31	954	1,710	1.77
1880	20	904	1,721	1.89
1881	33	955	1,625	1.70
1882	19	951	1,753	1.85
1883	20	957	1,762	1.85
1884	47	963	1,718	1.78

1878—11 Grade Short-Horns; 2 Grade Herefords.
1879—31 Grade Short-Horns.
1880—16 Grade Short-Horns; 4 Grade Herefords.
1881—28 Grade Short-Horns; 4 Grade Herefords; 1 Hereford-Short-Horn.
1882—13 Grade Short-Horns; 6 Grade Herefords.
1883—13 Grade Short-Horns; 7 Grade Herefords.
1884—25 Grade Short-Horns; 15 Grade Herefords; 1 Grade Holstein; 1 Grade Angus; 5 Short-Horn-Angus.

First Premium Animals—2 and under 3 years.

Year......	Exhibitor.	Name of Animal.	Breed.	Age in days.	Weight......	Average gain per day in lbs. since birth.
1878	J. D. Gillett	Number 47	Grade Short-Horn	962	1,885	1.96
1879	J. W. Hunt	Peter Cooper	" "	932	1,532	1.64
1880	A. F. More	Hawks	" "	940	1,900	2.02
1881	J. W. Hunt	Red Lord	" "	1,045	1,765	1.68
1882	D. M. Moninger	Grinnell	" "	1,011	1,850	1.83
1883	Fowler & Van Natta	Benton's Champion	Grade Hereford	938	1,910	2.02
1884	Morrow & Renick	Eales	Grade Short-Horn	1,053	2,048	1.94

Steer or Spayed Heifer, 1 and under 2 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	2	678	1,470	2.16
1879	14	538	1,307	2.42
1880	22	590	1,290	2.20
1881	5	665	1,288	1.93
1882	17	600	1,318	2.20
1883	70	594	1,239	2.11
1884	27	618	1,286	2.08

1878—2 Grade Short-Horns.
1879—14 Grade Short-Horns.
1880—18 Grade Short-Horns; 3 Grade Herefords; 1 Grade Devon.
1881—3 Grade Short-Horns; 2 Grade Herefords.
1882—7 Grade Short-Horns; 10 Grade Herefords.
1883—28 Grade Short-Horns; 42 Grade Herefords.
1884—17 Grade Short-Horns; 6 Grade Herefords; 1 Grade Holstein; 1 Grade Aberdeen-Angus; 1 Hereford-Texan; 1 Hereford-Jersey.

First Premium Animals—1 and under 2 years.

Year	Exhibitor.	Name of Animal.	Breed.	Age in days	Weight	Av. gain per day in lbs. since birth
1878	J. D. Gillett	Number 66	Grade Short-Horn	656	1,420	2.15
1879	"	McMullen	" "	605	1,196	1.97
1880	D. M. Moninger	Perfection	" "	671	1,395	2.07
1881	J. H. Potts & Son	Major	" "	719	1,565	2.17
1882	" "	Red Major	" "	715	1,600	2.23
1883	J. G. Imboden	Scratch	" "	630	1,640	2.60
1884	Fowler & VanNatta	Joseph	Grade Hereford	688	1,530	2.22

Steer or Spayed Heifer under 1 year.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1884	10	281	757	2.70

1884—3 Grade Short-Horns; 7 Grade Herefords.

First Premium Animals—under 1 year.

Year	Exhibitor.	Name of Animal.	Breed.	Age in days	Weight	Av. gain per day in lbs. since birth
1884	J. R. Price & Son	Lindall	Grade Hereford	350	920	2.62

Cow 3 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	......	......	......	......
1879	......	......	......	......
1880	1	4,225	1,770	0.41
1881	2	1,663	1,722	1.06
1882	3	1,773	1,896	1.07
1883	3	1,558	2,005	1.32

1880—1 Grade Short-Horn.
1881—1 Grade Short-Horn; 1 Grade Hereford.
1882—3 Grade Short-Horns.
1883—3 Grade Short-Horns.

First Premium Animals—3 years old or over.

Year	Exhibitor.	Name of Animal.	Breed.	Age in days	Weight	Av. gain per day in lbs. since birth
1878	......	......	......	......	......	......
1879	......	......	......	......	......	......
1880	H. A. Bassett	Spot	Grade Short-Horn	4,225	1,770	0.41
1881	J. D. Gillett	Lady Peerless	" "	1,268	1,520	1.19
1882	"	"	" "	1,644	1,880	1.14
1883	Can. W. F. S. Ass'n.	Canada's Pride	" "	1,320	2,185	1.65

ALL BREEDS AND GRADES BY AGES.

Steer 4 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs since birth.
1878	14	1,876	2,405	1.28
1879	19	1,782	2,330	1.31

1878—2 Short-Horns; 9 Grade Short-Horns; 1 Hereford; 1 Grade Hereford: 1 Devon.

1879—5 Short-Horns; 11 Grade Short-Horns; 2 Herefords; 1 Grade Hereford.

Prize Animals—4 years old or over.

Year	Exhibitor.	Name of Animal.	Breed.	Age in days	Weight	Average gain per day in lbs. since birth
1878	VanMeter & Hamilton	Young Mary No. 1	Short-Horn	1,902	2,440	1.28
1879	J. D. Gillett	Vanderbilt	Grade Short-Horn	1,573	2,118	1.34

ALL BREEDS AND GRADES BY AGES.

Steer, Barren or Spayed Cow, 3 and under 4 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	8	1,229	2,031	1.55
1879	19	1,281	1,965	1.51
1880	18	1,269	1,885	1.49
1881	25	1,263	1,961	1.55
1882	20	1,278	2,030	1.59
1883	22	1,318	2,093	1.56
1884	29	1,312	2,016	1.54

1878—7 Grade Short-Horns; 1 Grade Hereford.

1879—2 Short-Horns; 10 Grade Short-Horns; 2 Herefords; 3 Grade Herefords; 2 Grade Devons.

1880—4 Short-Horns; 8 Grade Short-Horns; 1 Hereford; 3 Grade Herefords; 2 Devons.

1881—19 Grade Short-Horns; 2 Herefords; 4 Grade Herefords.

1882—4 Short-Horns; 10 Grade Short-Horns; 6 Grade Herefords.

1883—1 Short-Horn; 12 Grade Short-Horns; 4 Herefords; 4 Grade Herefords; 1 Polled Angus.

1884—7 Short-Horns; 13 Grade Short-Horns; 1 Hereford; 4 Grade Herefords; 1 Hereford-Short-Horn; 1 Aberdeen-Angus; 2 Galloways.

Prize Animals—3 and under 4 years.

Year	Exhibitor.	Name of animal.	Breed.	Age in days..	Weight	Average gain per day in lbs. since birth..
1878	J. D. Gillett...	John Sherman.........	Grade Short-Horn	1,328	2,185	1.65
1879	J. H. Graves	Nichols................	" "	1,335	2,060	1.54
1880	C. M. Culbertson.......	Mossy Coat......	Grade Hereford.........	1,310	1,875	1.43
1881	J. D. Gillett..............	McMullen................	Grade Short-Horn.....	1,237	2,095	1.69
1882	D. M. Moninger.........	Tom Brown.............	" "	1,174	1,945	1.65
1883	Geary Bros..............	Black Prince............	Polled Angus............	1,380	2,355	1.70
1884	Fowler & VanNatta....	Benton's Champion...	Grade Hereford.........	1,301	2,300	1.76

Steer or Spayed Heifer 2 and under 3 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	13	935	1,651	1.73
1879	21	953	1,705	1.78
1880	22	915	1,752	1.91
1881	27	983	1,672	1.70
1882	17	971	1,783	1 84
1883	27	954	1,723	1.81
1884	52	963	1,720	1.79

1878—5 Short-Horns; 6 Grade Short-Horns; 2 Grade Herefords.

1879—3 Short-Horns; 17 Grade Short-Horns; 1 Hereford.

1880—5 Short-Horns; 9 Grade Short-Horns; 3 Herefords; 4 Grade Herefords; 1 Devon.

1881—6 Short-Horns; 15 Grade Short-Horns; 4 Grade Herefords; 1 Hereford-Short-Horn; 1 Devon.

1882—6 Grade Short-Horns; 2 Herefords; 6 Grade Herefords.

1883—3 Short-Horns; 14 Grade Short-Horns; 3 Herefords; 6 Grade Herefords; 1 Polled Angus.

1884—8 Short-Horns; 23 Grade Short-Horns; 6 Herefords; 13 Grade Herefords; 1 Hereford-Angus; 1 Grade Aberdeen-Angus.

Prize Animals—2 a [illegible]

Year	Exhibitor.	Name of Animal.	Breed.	Age in days.	Weight	Av. gain per day in lbs. since birth..
1878	J. D. Gillett..............	Steer No. 60.............	Grade Short-Horn.....	962	1,625	1.69
1879	J. W. Hunt................	Victoria Duke....	" "	932	1,532	1.64
1880	T. L. Miller...............	Conqueror	Grade Hereford........	832	1,845	2.21
1881	David Grant.............	Echard	Grade Short-Horn	880	1,500	1.70
1882	Earl & Stuart	Wabash	Hereford..................	1,077	1,940	1.80
1883	Can. W. F. S. Ass'n....	Clarence Kirklevingt'n	Short-Horn	1,009	2,045	2.02
1884	J. P. Gillett	Barney....................	Grade Short-Horn	1,074	1,951	1.81

Steer or Spayed Heifer, 1 and under 2 years.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	5	674	1,419	2.10
1879	14	572	1,276	2.25
1880	15	647	1,376	2.13
1881	6	656	1,212	1.84
1882	13	596	1,355	2.30
1883	53	602	1,240	2.07
1884	28	614	1,296	2.11

1878—3 Short-Horns; 2 Grade Short-Horns.

1879—4 Short-Horns; 7 Grade Short-Horns; 2 Herefords; 1 Grade Hereford.

1880—1 Short-Horn; 9 Grade Short-Horns; 1 Hereford; 1 Grade Hereford; 1 Grade Devon; 2 Short-Horn-Herefords.

1881—3 Grade Short-Horns; 2 Grade Herefords; 1 Devon.

1882—3 Short-Horns; 5 Grade Short-Horns; 1 Hereford; 4 Grade Herefords.

1883—7 Short-Horns; 21 Grade Short-Horns; 5 Herefords; 20 Grade Herefords.

1884—3 Short-Horns; 11 Grade Short-Horns; 3 Herefords; 6 Grade Herefords; 1 Hereford-Jersey; 2 Aberdeen-Angus; 1 Grade Aberdeen-Angus; 1 Grade Holstein.

Prize Animals—1 and under 2 years.

Year......	Exhibitor.	Name of Animal.	Breed.	Age in days.	Weight......	Av. gain per day in lbs. since birth.
1878	J. N. Brown's Sons	Duke of Sangamon	Short-Horn	650	1,480	2.28
1879	J. D. Gillett	Clara S. Reed	Grade Short-Horn	544	1,300	2.39
1880	T. L. Miller	Kansas	Grade Hereford	696	1,580	2.27
1881	J. H. Potts	Major	Grade Short-Horn	719	1,565	2.17
1882	J. H. Potts & Son	Red Major	" "	715	1,600	2.23
1883	J. G. Imboden	Scratch	" "	712	1,450	2.03
1884	J. R. Peak & Son	Roan Boy	" "	612	1,240	2.02

Steer or Spayed Heifer under 1 year.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1884	9	283	763	2.70

1884—3 Grade Short-Horns; 6 Grade Herefords.

Prize Animals under 1 year.

Year......	Exhibitor.	Name of Animal.	Breed.	Age in days.	Weight......	Av. gain per day in lbs. since birth.
1884	J. R. Price	Lindall	Grade Hereford	350	920	2.62

Cow 3 years old or over.

Year.	Entries.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	6	2,282	1,720	0.85
1879	10	2,442	1,728	0.77
1880	5	2,934	1,669	0.68
1881	8	1,891	1,659	0.89
1882	9	2,051	1,816	0.96
1883	16	2,229	1,783	0.88

1878—4 Short-Horns; 2 Herefords.
1879—8 Short-Horns; 1 Hereford; 1 Devon.
1880—3 Short-Horns; 1 Grade Short-Horn; 1 Hereford.
1881—3 Short-Horns; 1 Grade Short-Horn; 3 Herefords; 1 Grade Hereford.
1882—6 Short-Horns; 2 Grade Short-Horns; 1 Hereford.
1883—6 Short-Horns; 3 Grade Short-Horns; 4 Herefords; 2 Holstein; 1 Polled Angus.

Prize Animals—Cow 3 years old or over.

Year.	Exhibitor.	Name of Animal.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	T. L. Miller	Jennie	Hereford	1,677	1,595	0.95
1879	R. K. & A. S. Brownlee	Red Bettie	Short-Horn	2,035	1,769	0.86
1880	W. Scott	Forest Queen 2d	"	2,136	1,710	0.80
1881	Ca. W. Farm S. Ass'n.	Lady Aberdeen 3d	"	1,873	1,875	1.00
1882	J. H. Potts & Son	Acorn 6th	"	1,404	1,865	1.32
1883	Ca. W. Farm S. Ass'n.	Canada's Pride	Grade Short-Horn	1,320	2,185	1.65

SWEEPSTAKES.

Best Animal shown in Lot for Short-Horns.

Year.	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1884	Ca. W. Farm S. Ass'n	C. Kirklevingt'n.	1,372	2,400	1.74

Best Animal shown in Lot for Herefords.

Year.	Exhibitor.	Name of Animal.	Age in Days.	Weight.	Average gain per day in lbs. since birth.
1884	Indiana Blooded Stock Co.	Prince	996	1,860	1.86

Best Animal shown in Lot for Aberdeen-Angus.

Year..	Exhibitor.	Name of Animal.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1884	M. H. Cochrane...............	NetherwoodJock	1,404	1,890	1.35

Best Animal shown in Lot for Grades and Crosses.

Year.........	Exhibitor.	Name of Animal.	Breed.	Age in days..	Weight......	Average gain per day in lbs. since birth...
1884	Jno. Ross & Son.......	Charley Ross	Grade Short-Horn.....	1,250	2,265	1.81

GRAND SWEEPSTAKES ANIMALS.

Year, ...	Exhibitor.	Name of Animal.	Breed.	Age in days.	Weight......	Average gain per day in lbs. since birth..
1878	John D. Gillett..........	John Sherman..........	Grade Short-Horn....	1,328	2,185	1.65
1879	J. H. Graves............	Nichols................	" "	1,335	2,060	1.54
1880	"	John Sherman..........	" "	1,701	2,465	1.44
1881	John D. Gillett..........	McMullen...............	" "	1,237	2,095	1.69
1882	"	"	" "	1,613	2,565	1.59
1883	C. M. Culbertson........	Roan Boy	Grade Hereford........	1,415	2,125	1.50
1884	Can. W. F. Stk. Ass'n..	Clarence Kirklevingt'n	Short-Horn	1,372	2,400	1.74

Lot Cattle.

Lot Cattle—4 years old or over.

Year.	No. Steers.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	10	1,534	2,245	1.48
1879	6	2,155	2,399	1.13
1879	6	1,599	2,147	1.34
Average.........................	....	1,764	2,264	1.32

1878—First car, 6 Short-Horns and 4 Grade Short-Horns.
1879—Second car, 2 Short-Horns and 4 Grade Short-Horns.
1879—Third car, 6 Grade Short-Horns.

Premium Lot Cattle—4 years old or over.

Year..	Exhibitor.	No. Steers..	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	Van Meter & Hamilton......	10	1,539	2,245	1.48
1879	John D. Gillett...............	6	1,599	2,147	1.34

Lot Cattle—3 and under 4 years.

Lot.	Year.	No. Steers.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1	1878	10	1,394	2,047	1.48
2	1879	8	1,247	2,017	1.55
3	1879	8	1,261	2,030	1.59
4	1879	8	1,280	1,868	1.45
5	1880	8	1,285	1,922	1.49
6	1880	8	1,255	1,985	1.56
7	1881	8	1,267	2,048	1.61
8	1881	8	1,291	1,957	1.52
9	1881	8	1,290	1,985	1.54
10	1881	8	1,266	1,925	1.52
11	1882	8	1,304	2,026	1.56
12	1882	8	1,271	2,101	1.65
13	1882	8	1,254	2,163	1.72
14	1882	8	1,338	1,760	1.31
15	1883	8	1,338	2,073	1.55
16	1883	8	1,255	2,098	1.59
17	1884	5	1,205	1.840	1 53
18	1884	5	1,238	1,830	1.48
19	1884	5	1,359	2.133	1.57
20	1884	4	1,275	1,941	1.52
	Average		1,284	1,987	1.55

No. 1, 10 Grade Short-Horns; No. 2, 8 Grade Short-Horns; No. 3, 8 Grade Short-Horns; No. 4, 1 Hereford, 7 Grade Herefords; No. 5, 8 Grade Short-Horns; No. 6, 8 Grade Short-Horns; No. 7, 8 Grade Short-Horns; No. 8, 8 Grade Short-Horns; No. 9, 5 Short-Horns, 3 Grade Short-Horns; No. 10, 8 Grade Short-Horns; No. 11, 8 Grade Short-Horns; No. 12, 8 Grade Short-Horns; No. 13, 8 Grade Short-Horns; No. 14, 8 Grade Short-Horns; No. 15, 1 Short-Horn, 5 Grade Short-Horns, 2 Grade Herefords; No. 16, 8 Grade Herefords; No. 17, 3 Short-Horns, 2 Grade Short-Horns; No. 18, 5 Grade Short-Horns; No. 19, 5 Grade Short-Horns; No. 20, 1 Hereford, 3 Grade Herefords.

First Premium Lot Cattle—3 and under 4 years.

Year.	Exhibitor.	No. Steers.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	J. D. Gillett	10	1,394	2,057	1.48
1879	"	8	1,247	2,047	1.55
1880	"	8	1,255	1,985	1.56
1881	"	8	1,267	2,048	1.61
1882	"	8	1,271	2,101	1.65
1883	J. B. Sherman	8	1,338	2,073	1.55
1884	J. D. Gillett	5	1,359	2,133	1.57

Lot Cattle—2 and under 3 years.

Lot.	Year.	No. Steers.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1	1878	10	1,025	1,667	1.63
2	1878	10	1,102	1,759	1.60
3	1879	10	965	1,818	1.87
4	1879	10	918	1,695	1.77
5	1879	10	945	1,648	1.74
6	1880	10	925	1,705	1.84
7	1881	10	905	1,726	1.91
8	1881	10	934	1,475	1.58
9	1882	10	1.013	1,864	1.84
10	1882	10	932	1,826	1.96
11	1882	10	977	1,551	1 59
12	1883	10	948	1,665	1.76
13	1883	10	922	1,715	1.87
14	1884	5	976	1,771	1.81
15	1884	5	904	1,478	1.63
16	1884	5	950	1,741	1.83
17	1884	5	941	1,594	1.70
18	1884	5	928	1,631	1.76

Lot Cattle 2 *and under* 3 *years*—Continued.

Lot.	Year.	No. Steers.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
19	1884	5	1,024	1,842	1.80
20	1884	5	917	1,713	1.87
21	1884	5	994	1,718	1.73
22	1884	5	978	1,792	1.83
23	1884	5	977	1,637	1.67
24	1884	5	1,009	1,730	1.71
25	1884	5	961	1,789	1.86
	Average	....	963	1,702	1.77

No. 1, 10 Grade Short-Horns; No. 2, 10 Grade Short-Horns; No. 3, 10 Grade Short-Horns; No. 4, 10 Grade Short-Horns; No. 5, 1 Short-Horn and 9 Grade Short-Horns; No. 6, 10 Grade Short-Horns; No. 7, 10 Grade Short-Horns; No. 8, 2 Short-Horns and 8 Grade Short-Horns; No. 9, 10 Grade Short-Horns; No. 10, 10 Grade Short-Horns; No. 11, 10 Grade Herefords; No. 12, 10 Grade Short-Horns; No. 13, 10 Grade Short-Horns; No. 14, 3 Short-Horns, 2 Grade Short-Horns; No. 15, 5 Grade Short-Horns; No. 16, 3 Herefords, 2 Grade Herefords; No. 17, 3 Herefords, 2 Grade Herefords; No. 18, 5 Grade Short-Horns; No. 19, 4 Short-Horns, 1 Grade Short-Horn; No. 20, 4 Grade Short-Horns, 1 Grade Hereford; No. 21, 5 Grade Short-Horns; No. 22, 5 Grade Short-Horns; No. 23, 1 Hereford, 4 Grade Herefords; No. 24, 1 Grade Short-Horn, 4 Short-Horn-Angus; No. 25, 5 Grade Herefords.

First Premium Lot Cattle—2 and under 3 years.

Year.	Exhibitor.	No. Steers.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	J. D. Gillett	10	1,025	1,667	1.63
1879	"	10	965	1,818	1.87
1880	"	10	925	1,705	1.84
1881	"	10	905	1,726	1.91
1882	D. M. Moninger	10	1,013	1,864	1.84
1883	J. D. Gillett	10	922	1,715	1.87
1884	Fowler & Van Natta	5	961	1,789	1.86

Lot Cattle—1 and under 2 years.

Lot.	Year.	No. Steers.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1	1878	....	....	....	....
2	1879	12	541	1,313	2.42
3	1880	13	549	1,187	2.20
4	1881	....	....	....	....
5	1882	12	526	1,158	2.20
6	1883	12	623	1,183	2.01
7	1883	12	620	1,249	2.02
8	1883	11	679	1,350	1.99
9	1883	12	601	1,241	2.06
10	1883	12	577	1,161	2.01
11	1884	5	595	1,319	2.22
12	1884	5	617	1,281	2.08
13	1884	5	623	1,294	2.08
14	1884	5	678	1,425	2.10
	Average	....	602	1,272	2.11

No. 2, 12 Grade Short-Horns; No. 3, 12 Grade Short-Horns; No. 5, 12 Grade Short-Horns; No. 6, 1 Hereford, 11 Grade Herefords; No. 7, 2 Herefords, 10 Grade Herefords; No. 8, 3 Short-Horns, 7 Grade Short-Horns; No. 9, 12 Grade Short-Horns; No. 10, 12 Grade Short-Horns; No. 11, 1 Short-Horn, 4 Grade Short-Horns; No. 12, 2 Short-Horns, 3 Grade Short-Horns; No. 13, 5 Grade Short-Horns; No. 14, 1 Hereford, 4 Grade Herefords.

First Premium Lot Cattle—1 and under 2 years.

Year.	Exhibitor.	No. Steers.	Average age in days.	Average weight.	Average gain per day in lbs. since birth.
1878	....	....	....	....	....
1879	J. D. Gillett..................	12	541	1,313	2.42
1880	“	12	549	1,187	2.20
1881	....	....	....	....	....
1882	J. D. Gillett..................	12	526	1,158	2.20
1883	Fowler & Van Natta..........	12	620	1,249	2.02
1884	J. H. Potts & Son............	5	595	1,319	2.22

HEAVIEST FAT STEER.

Year.	Exhibitor.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	Charles Miller..................	Gr. Short-Horn..	2,162	3,155	1.45
1879	J. B. Sherman..................	“ “	2,403	2,840	1.18
1880	“ “	“ “	2,705	3,130	1.13
1881	“ “	“ “	1,633	2,435	1.49
1882	“ “	“ “	2,769	3,050	1.10
1883	“ “	“ “	1,977	2,720	1.37
1884	“ “	“ “	3,498	3,220	.92

GAIN PER DAY.

STEERS SHOWING MOST RAPID GROWTH.

Premium Steer—4 years old or over.

Year.	Exhibitor.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	Van Meter & Hamilton......	Gr. Short-Horn..	1,663	2,605	1.56
1879	J. H. Graves..................	“ “	1,613	2,820	1.74

Premium Steer, Barren or Spayed Cow—3 and under 4 years.

Year.	Exhibitor.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	Van Meter & Hamilton.......	Gr. Short-Horn..	1,298	2,305	1.70
1879	John D. Gillett................	“ “	1,269	2,307	1.81
1880	“	Short-Horn	1,250	2,215	1.77
1881	“	Gr. Short-Horn..	1,176	2,130	1.81
1882	H. & I. Goff	Short-Horn	1,305	2,535	1.94
1883	John D. Gillett................	Gr. Short-Horn..	1,222	2,445	2.00
1884	“	“ “	1,250	2,340	1.87

Entries 1880—1 Grade Short-Horn; 1 Devon.
“ 1881—1 Short-Horn; 7 Grade Short-Horns; 2 Grade Herefords.
“ 1882—2 Short-Horns; 4 Grade Short-Horns; 3 Grade Herefords.
“ 1883—6 Grade Short-Horns; 1 Hereford.
“ 1884—1 Short-Horn; 8 Grade Short-Horns; 1 Grade Hereford; 1 Hereford-Short-Horn.

Premium Steer or Spayed Heifer—2 and under 3 years.

Year.	Exhibitor.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	J. N. Brown's Sons	Short-Horn	783	1,585	2.02
1879	J. D. Gillett	Gr. Short-Horn	977	2,081	2.12
1880	T. L. Miller	Grade Hereford	832	1,845	2.21
1881	J. D. Gillett	Gr. Short-Horn	872	1,935	2.21
1882	"	" "	858	2,220	2.59
1883	John Ross & Son	" "	751	1,660	2.21
1884	Tom C. Ponting	Grade Hereford	867	1,815	2.09

Entries 1880—3 Short-Horns; 5 Grade Short-Horns; 2 Grade Herefords.
" 1881—9 Grade Short-Horns; 1 Grade Hereford.
" 1882—3 Grade Short-Horns; 2 Herefords; 3 Grade Herefords.
" 1883—3 Short-Horns; 7 Grade Short-Horns; 1 Grade Hereford.
" 1884—3 Short-Horns; 9 Grade Short-Horns; 1 Hereford; 4 Grade Herefords: 1 Grade Aberdeen-Angus.

Premium Steer or Spayed Heifer—1 and under 2 years.

Year.	Exhibitor.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	J. N. Brown's Sons	Short-Horn	650	1,480	2.28
1879	J. D. Gillett	Gr. Short-Horn	513	1,373	2.67
1880	Cobb & Phillips	" "	585	1,450	2.47
1881	J. H. Potts & Son	" "	719	1,565	2.17
1882	Cobb & Phillips	Short-Horn	384	1,140	2.97
1883	" "	Gr. Short-Horn	381	1,045	2.74
1884	Ind. Blooded Stock Co	Ab.-Angus	410	1,125	2.74

Entries 1880—1 Short-Horn; 7 Gr. Short-Horns; 1 Gr. Hereford; 1 Hereford Short-Horn.
" 1881—3 Devons; 3 Grade Short-Horns; 2 Grade Herefords.
" 1882—2 Short-Horns; 7 Grade Short-Horns; 3 Grade Herefords.
" 1883—1 Short-Horn; 7 Grade Short-Horns; 7 Grade Herefords.
" 1884—2 Short-Horns; 6 Grade Short-Horns; 3 Grade Herefords; 3 Aberdeen-Angus; 1 Grade Angus; 1 Grade Holstein.

Premium Steer or Spayed Heifer—under 1 year.

Year.	Exhibitor.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1884	B. Waddel	Gr. Short-Horn	288	932	3.24

Entries 1884—3 Grade Short-Horns; 5 Grade Herefords.

COST OF PRODUCTION.

The average net profit per head realized on the twenty competing animals from 1 to 12 months of age was $16.02. The ten competing animals from 1 to 24 months of age returned a profit of $12.21 per head. There was an average loss per head of $34.05 on the three steers fed from 1 to 36 months of age. The average cost of production per pound for the several periods named in the following tables is as follows: Steer, 1 to 12 months of age, $4.04 per 100 pounds live weight; steer 1 to 24 months of age, $5.08 per 100 pounds; steer 1 to 36 months of age, $7.47 per 100 pounds. Three grade Short-Horn steers at 12 months of age were produced at an average cost of $3 24 per 100 pounds, and averaged 983 pounds each at the age named. This is the best showing made in the following tables, which give the cost of production of twenty steers from 1 to 12 months of age; ten steers from 1 to 24 months of age, and three steers from 1 to 36 months of age.

COST OF PRODUCTION.

Steer or Spayed Heifer 1 to 12 months old.

Year......	Breed.	Number animals.	Average cost production per head 1 to 12 mos	Average weight at 12 mos.	Average value per head at 12 mos. at $6 per 100 lbs.	Net profit per head at 12 mos.	Average cost production per lb. 1 to 12 mos.
1882	Short-Horn	3	$51 43	1,030	$61 80	$10 37	$5 03
1883	Short-Horn	1	56 64	1,000	60 00	3 36	5 66
	Average	2	$54 03	1,015	$60 90	$6 86	$5 34
1882	Grade Short-Horn..	3	$31 96	983	$59 00	$28 04	$3 24
1883	Grade Short-Horn..	7	34 88	1,044	62 66	27 78	3 34
	Average..........	5	$33 42	1,013	$60 83	$27 91	$3 29
1882	Hereford..............	....	....	....	....	....	....
1883	Hereford..............	1	$23 75	700	$42 00	$18 25	$3 39
	Average..........	1	$23 75	700	$42 00	$18 25	$3 39
1882	Grade Hereford.....	3	$28 19	737	$44 20	$16 01	$3 82
1883	Grade Hereford.....	2	24 35	590	35 40	11 05	4 15
	Average..........	2	$26 27	663	$39 80	$13 53	$3 98
1882	Grade Short-Horn..	3	$31 96	983	$59 00	$28 04	$3 24
1882	Grade Hereford	3	28 19	737	44 20	16 01	3 82
1883	Short-Horn	1	56 64	1,000	60 00	3 36	5 66
1883	Grade Short-Horn..	7	34 88	1,044	62 66	27 78	3 34
1883	Hereford..............	1	23 75	700	42 00	18 25	3 39
1883	Grade Hereford.....	2	24 35	590	35 40	11 05	4 15

COMPARISON.

Short-Horns average...	2	$54 03	1,015	$60 90	$6 86	$5 34
Grade Short-Horns av..	5	33 42	1,013	60 83	27 91	3 29
Herefords average......	1	23 75	700	42 00	18 25	3 39
Grade Herefords av.....	2	24 35	590	35 40	11 05	4 15
Average	2	$33 88	829	$49 78	$16 02	$4 04

COST OF PRODUCTION.

Steer or Spayed Heifer 1 to 24 months old.

Year	Breed.	Number animals.	Average cost production per head 1 to 24 mos.	Average weight at 24 mos.	Average value per head at 24 mos. at $6 per 100 lbs.	Net profit per head at 24 mos.	Average cost of producti'n per lb. 1 to 24 mos.
1882	Short-Horn........	1	$86 80	1,600	$96 00	$9 20	$5 42
1883	Short-Horn........	1	100 36	1,500	90 00	*10 36	6 69
	Average........	1	$93 58	1,550	$93 00	*$0 58	$6 05
1882	Grade Short-Horn	3	$79 23	1,530	$91 80	$12 57	$5 17
1883	Grade Short-Horn	3	88 39	1,778	106 70	17 81	4 99
	Average........	3	$83 81	1,654	$99 25	$15 19	$5 08
1882	Hereford...........	....	....	....	....	....	....
1883	Hereford...........	1	$52 35	1,100	$66 00	$13 65	$4 76
	Average........	1	$52 35	1,100	$66 00	$13 65	$4 76
1882	Grade Hereford..	1	$61 61	1,370	$82 20	$20 59	$4 42
1883	Grade Hereford...	....	....	....	....	....	....
	Average........	1	$61 61	1,370	$82 20	$20 59	$4 42

COMPARISON.

	Short-Horns average...	1	$93 58	1,550	$93 00	*$0 58	$6 05
	Grade Short-Horns av..	3	83 81	1,654	99 25	15 19	5 08
	Herefords average......	1	52 35	1,100	66 90	13 65	4 76
	Grade Herefords av.....	1	61 61	1,370	82 20	20 59	4 42
	Average	1	$72 84	1,418	$85 11	$12 21	$5 08
1882	Grade Short-Horn	3	$79 23	1.530	$91 80	$12 57	$5 17
1882	Grade Hereford...	1	61 61	1,370	82 20	20 59	4 42
1883	Short-Horn.	1	100 36	1,500	90 00	*10 36	6 69
1883	Grade Short-Horn	3	88 89	1,778	106 70	17 81	4 99
1883	Hereford..........	1	52 35	1,100	66 00	13 65	4 76

* Loss.

COST OF PRODUCTION.

Steer or Spayed Heifer 1 to 36 months old.

Year	Breed.	Number animals.	Average cost production per head 1 to 36 mos.	Average weight at 36 mos.	Average value per head at 36 mos. at $6 per 100 lbs.	*Net loss per head at 36 mos.	Average cost production per lb. 1 to 36 mos.
1882..	Short-Horn	1	$167 29	2,250	$135 00	$32 29	$7 43
1883..	Short-Horn	....	....	....	....	....	....
	Average	1	$167 29	2,250	$135 00	$32 29	$7 43
1882..	Grade Short-Horn	1	$167 29	2,250	$135 00	$32 29	$7 43
1883..	Grade Short-Horn	1	186 36	2,450	147 00	39 36	7 60
	Average	1	$176 82	2,350	$141 00	$35 82	$7 51

COMPARISON.

Breed.		Number animals.	Average cost production per head 1 to 36 mos	Average weight at 36 mos.	Average value per head at 36 mos. at $6 per 100 lbs	*Net loss per head at 36 mos.	Average cost production per lb. 1 to 36 mos
Short-Horn, av.		1	$167 29	2,250	$135 00	$32 29	$7 43
Grade Short-Horn, av.		1	176 82	2,350	141 00	35 82	7 51
Average		1	$172 50	2,300	$138 00	$34 05	$7 47
1882	Grade Short-Horn	1	$167 29	2,250	$135 00	$32 29	$7 43
1883	Grade Short-Horn	1	186 36	2,450	147 00	39 36	7 60

*Steers of extra quality such as these statistics represent frequently sell for more than the estimated price of $6 per 100 pounds live weight.

COST OF PRODUCTION.

The following table gives the average cost of production of animals competing in this ring for the past two years:

Animals 1 to 12 months old.

Items.	Nine head 1882.	Six head 1883,
Average value of animals at birth, $5.00	....	....
" " milk consumed	$15 86	$12 53
" " grain consumed	13 63	8 82
" " hay and forage consumed	2 46	1 78
" " pasture consumed	1 75	3 72
" annual expense for care	5 00	4 00
" gain during the year in pounds	9 17	9 26
" cost of production per 100 lbs. on the year's gain	4 03	3 70
" weight at close of year	9 17	9 26
" cost feed and care	39 19	33 93
" value at close of year at $6 per 100 lbs	55 00	55 58
" net profit or loss at close of year	15 81	21 65

Animals 12 to 24 months.

Items.	Five head 1882,	Four head 1883.
Average value grain consumed	$29 33	$28 48
" " hay and forage consumed	8 06	5 66
" " pasture consumed	2 46	8 20
" annual expense for care	5 00	6 00
" gain during year in pounds	5 62	5 87
" cost of production per 100 lbs. on the year's gain	7 98	8 12
" weight at close of year	15 12	15 87
" cost feed and care	44 85	47 25
" value at close of year at $6 per 100 lbs	90 72	95 22.
" net profit or loss at close of year	6 68	14 04

Animal 24 to 36 months.

Items.	Two head. 1882.	One head. 1883.
Average value grain consumed	$48 00	$59 64
" " hay and forage consumed	16 00	....
" " pasture consumed	6 50	....
" " other food consumed	6 00	....
" annual expense for care	5 00	9 00
" gain during year in pounds	6 50	2 00
" cost of production per 100 pounds on the year's gain	12 54	4 18
" weight at close of year	22 50	24 50
" cost of feed and care	81 50	83 64
" value at close of year @ $6 per 100 pounds	135 00	147 00
" net profit or loss at close of year	*30 54	*17 82

* Loss.

COMPARISON FIRST PRIZE ANIMALS OF THE SEVERAL BREEDS OF CATTLE EXHIBITED IN 1884.

Steer, Barren or Spayed Cow, 3 and under 4 years.

Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
Short-Horn	1,372	2,400	1.74
Hereford	1,374	1,560	1.13
Aberdeen-Angus	1,404	1,890	1.35
Grades or Crosses	1,250	2,265	1.81

Steer or Spayed Heifer 2 and under 3 years.

Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
Short-Horn	1,038	1,708	1.64
Hereford	996	1,860	1.86
Grades or Crosses	1,053	2,048	1.94

Steer or Spayed Heifer 1 and under 2 years.

Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
Short-Horn	625	1,370	2.19
Hereford	655	1,250	1.81
Aberdeen-Angus	634	1,316	2.07
Grades or Crosses	688	1,530	2.22

Steer or Spayed Heifer under 1 year.

Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
Grades or Crosses	350	920	2.62

DRESSED CARCASS.

Steer or Spayed Heifer 3 and under 4 years.

Name of Animal.	Breed.	Age in days	Average gain per day since birth	Weight at home	Live weight at slaughter	Weight dressed carcass or four quarters	Per cent. net carcass or quarters to gross weight	Weight carcass, hide and tallow	Per ct. profitable wt. (carcass, hide tallow) to gross or live wt.	Weight tallow	Weight hide	Weight left fore quarter	Weight right fore quarter	Weight left hind quarter	Weight right hind quarter
Chicago	Short-Horn	1,195	1.76	2,105	2,065	1,398	.67	1,611	.78	115	98	350	353½	353	341½
Netherwood Jock	Aberdeen-Angus	1,404	1.35	1,890	1,835	1,236	.67	1,457	.79	136	85	326	317	298	294
Jim Lee	Grade Hereford	1,267	1.50	1,905	1,875	1,229	.65	1,441	.77	107	105	325	326½	289	288½
Clarence Kirklevington	Short-Horn	1,372	1.74	2,400	2,370	1,659½	.70	1,906½	.80	152	95	449	432½	400½	377½
President	Grade Short-Horn	1,306	1.77	2,316	2,260	1,606	.71	1,834	.81	125	103	440	430½	363	373½
White Stockings	" "	1,246	1.35	1,685	1,690	1,104½	.65	1,268½	.75	71	93	293	287½	259½	264½
Hoosier	Hereford	1,389	1.49	2,075	2,030	1,418	.69	1,632	.80	106	108	365	353½	356	343
Price	Grade Hereford	1,307	1 64	2,150	2,140	1,445½	.67	1,676½	.78	131	100	386	386½	346½	327½
Charley Ross	Grade Short-Horn	1,250	1.81	2,265	2,175	1,470	.67	1,660	.76	81	106	397	402½	340	330½
Young Mary of Turlington	Short-Horn	1,380	1.34	1,850	1,815	1,219½	.67	1,405½	.77	116	70	307½	327½	292	292½
1884.. Average 10 animals		1,312	1.57	2,064	2,025	1,383	.67	1,589	.78	114	96	364	362	330	323
1883.. " 5 "		1,303	1.51	2,057	2,018	1,384	.68	1,659½	.82	164½	111	376	369	326	313
1882.. " 5 "		1,248	1.46	1,843	1,776	1,178	.66	1,425	.80	144	102	319	313	271	275
1881.. " 3 "		1,284	1.44	1,922	1,846	1,233	.67	1,420	.77	92	95	337	338	285	272
1880.. " 3 "		1,256	1.41	1,790	1,725	1,181	.68	1,453	84	171	100	314	307	275	285
1879.. " 3 "		1,267	1.42	......	1,790	1,183	.66	1,456	.81	177	97	318	310	282	272

First Premium Animals.

Name of Animal.	Breed.	Age in days	Average gain per day since birth	Weight at home	Live weight at slaughter	Weight dressed carcass or four quarters	Per cent. net carcass or quarters to gross weight	Weight carcass, hide and tallow	Per ct. profitable wt. (carcass, hide tallow) to gross or live wt.	Weight tallow	Weight hide	Weight left fore quarter	Weight right fore quarter	Weight left hind quarter	Weight right hind quarter
1884.. Clarence Kirklevington	Short-Horn	1,372	1.74	2,400	2,370	1,659½	.70	1,906½	.80	152	95	449	432½	400½	377½
1883.. Starlight	Grade Short-Horn	1,416	1 54	2,180	2,105	1,430	.68	1,699½	.81	167½	102	387	379	340	324
1882.. Sir Richard	Hereford	1,121	1.57	1,775	1,690	1,149	.68	1,375	.81	118½	107½	295	290	277	287
1881.. Broad Horns	Grade Hereford	1,291	1.42	1,900	1,830	1,227	.67	1,399	.76	68	103	345	340	277	265
1880.. Alex	Hereford	1,183	1.58	1,910	1,850	1,250	.67	1,545	.83	184	111	327	318	295	310
1879.. Barney	Grade Hereford	1,274	1.56	......	1,963	1,317	.67	1,618	.82	195	106	371	354	305	287

DRESSED CARCASS—Age 3 and under 4 years—*Continued.*

	Name of Animal.	Breed.	Weight of head	Weight of feet	Weight of paunch	Weight of guts	Weight of liver	Weight of heart	Weight of tongue	Weight of lungs	Hide trimmings	Weight of blood	Loss of weight by shrinkage	Weight of unprofitable parts	Per ct. unprofitable wt. including shrinkage to gross or live weight
	Chicago	Short-Horn	37	20	161	44	17	8	10	20	16	54	67	387	.22
	Netherwood Jock	Aberdeen-Angus	35	21	115	46	15	6	12	20	13	55	40	338	.21
	Jim Lee	Grade Hereford	39	20	150	45	15	5	13	17	11	47	72	362	.23
	Clarence Kirklevington	Short-Horn	44	23	118	80	18	9	13	23	24	53	58½	405	.20
	President	Grade Short-Horn	41	22	142	55	17	7	12	20	25	47	38	358	.19
	White Stockings	" "	39	22	133	47	17	5	11	18	12	49	68½	357	.25
	Hoosier	Hereford	40	21	127	60	14	5	11	18	12	40	50	348	.20
	Price	Grade Hereford	37	21	152	60	17	7	11	25	22	46	65½	398	.22
	Charley Ross	Grade Short-Horn	40	22	221	42	16	7	12	17	9	59	70	445	.24
	Young Mary of Turlington	Short-Horn	30	15	125	69	15	7	8	16	16	39	69½	340	.23
1884.	Average 10 animals		38	21	144	55	16	7	11	19	16	50	60	376	.22
1883..	" 5 "		39½	20	185	20	16½	4	10	16½	......	53½	42½	358½	.19
1882..	" 5 "		40	19	122	32	13	6	6	9		50	52	351	.20
1881..	" 3 "		34	21	149	56	17	6½	11½	22	11	41	56	......	.23
1880..	" 3 "		30½	18	......	......	......	......	......	......	......	......	......	......	......
1879	" 3 "		50	......	......	......	......	......	......	......	......	......	......	......	......

First Premium Animals.

	Name of Animal.	Breed.	Weight of head	Weight of feet	Weight of paunch	Weight of guts	Weight of liver	Weight of heart	Weight of tongue	Weight of lungs	Hide trimmings	Weight of blood	Loss of weight by shrinkage	Weight of unprofitable parts	Per ct. unprofitable wt. including shrinkage to gross or live weight
1884..	Clarence Kirklevington	Short-Horn	44	23	118	80	18	9	13	23	24	53	58½	405	.20
1883..	Starlight	Grade Short-Horn	37½	21	168	22	18½	5	9	17	......	54	54	406	.19
1882..	Sir Richard	Hereford	39	20	131	25	13½	5	6	8½	......	44	23	315	.19
1881.	Broad Horns	Grade Hereford	36½	19	138	55½	15	6½	13	24½	10	41	72	......	.23
1880..	Alex	Hereford	32½	18½	......	......	......	......	......	......	......	......	......	......	......
1879..	Barney	Grade Hereford	55	19	......	......	......	......	......	......	......	......	......	......	......

DRESSED CARCASS—*Continued.*

Age 2 and under 3 years.

Name of Animal.	Breed.	Age in days	Average gain per day since birth	Weight at home	Live weight at slaughter.	Weight dressed carcass or four quarters	Per cent. net carcass or quarters to gross weight	Weight carcass, hide and tallow	Per ct. profitable wt. (carcass, hide and tallow) to gross or live weight	Weight tallow	Weight hide	Weight left fore quarter.	Weight right fore quarter	Weight left hind quarter.	Weight right hind quarter
Maine Boy	Hereford	951	1:73	1,555	1,555	1,036½	.66	1,210	.78	78	96	276	268½	246	246
Abernethy	Grade Aberdeen-Angus	832	1.98	1,860	1,605	1,059½	.66	1,220½	.76	75	86	279½	276½	256	247½
Fishback	Grade Short-Horn	917	1.67	1,652	1,530	1,002	.65	1,158	.76	72	84	263½	259	234½	245
Choctaw	Hereford	1,077	1 65	1.530	1,740	1,181½	.68	1,345	.77	71	93	305	309	289½	278
Shadeland	Grade Hereford	876	2 00	1,785	1,720	1,173	.68	1,369	.80	98	98	299	299½	289	285½
Ohio Belle	Grade Short-Horn	1,075	1.54	1,760	1,620	1,116½	.69	1,253½	.77	60	77	281	284	276½	275
Robert	Hereford	1,056	1 33	1.652	1,380	887½	.64	1,060½	.77	83	90	227	231½	216	213
Underidge	Short-Horn	957	1.78	1,405	1,715	1,107	.64	1,310	.76	110	93	281	284½	270	271½
Prince	Hereford	996	1.86	1,705	1,845	1,304	.70	1,472	.80	70	98	332½	322½	317	332
McCroskey	Grade Short-Horn	939	1.64	1,535	1,480	977½	.66	1,119½	.76	57	85	255	257	234	231½
Quality	" " "	1,052	1.68	1,768	1,755	1,135	.64	1,309	.75	72	102	291	294	278	272
1884 Average 11 animals		975	1 71	1,655	1,631	1,089	.67	1,257	.77	77	91	281	280	264	263
1883 " 4 "		986	1.74	1,709	1,785	1,203	.67	1,452	.81	163	86	342	320	271	270
1882 " 3 "		999	1.68	1,178	1,735	1,115	.64	1,321¼	.76	101½	105	294	285	272	264
1881 " 2 "		......	....	1,516	1,460	977	.66	1,145	.78	81	87	267	242	232	235
1880 " 2 "		......	....	1,560	1,461	974	.66	1,209	.82	145	90	260	253	227	233

First Premium Animals.

Name of Animal.	Breed.	Age in days	Average gain per day since birth	Weight at home	Live weight at slaughter.	Weight dressed carcass or four quarters	Per cent. net carcass or quarters to gross weight	Weight carcass, hide and tallow	Per ct. profitable wt. (carcass, hide and tallow) to gross or live weight	Weight tallow	Weight hide	Weight left fore quarter.	Weight right fore quarter	Weight left hind quarter.	Weight right hind quarter
1884 Abernethy	Grade Aberdeen-Angus	832	1 98	1,860	1,605	1,059½	.66	1,220½	.76	75	86	279½	276½	256	247½
1883 Waterside Jock	Aberdeen-Angus	999	1.82	1,815	1.785	1,203	.67	1,452	.81	163	86	342	320	271	270
1882 Jay	Grade Hereford	972	1.78	1,178	1,735	1,115	.64	1,321¼	.76	101½	105	294	285	272	264
1881 Echard	Grade Short-Horn	......	....	1,516	1,460	977	.66	1,145	.78	81	87	267	242	232	235
1880 Blank	" " "	......	....	1,560	1,461	974	.66	1,209	.82	145	90	260	253	227	233

DRESSED CARCASS—Age 2 and under 3 years—*Continued.*

Name of Animal.	Breed.	Weight of head	Weight of feet	Weight of paunch	Weight of guts	Weight of liver	Weight of heart	Weight of tongue	Weight of lungs	Hide trimmings	Weight of blood	Loss of weight by shrinkage	Weight of unprofitable parts	Per ct. unprofitable wt. including shrinkage to gross or live weight
Maine Boy	Hereford	40	18	119	54	14	5	10	13	10	34	31	314	.22
Abernethy	Grade Ab.-Angus	30	20	144	49	15	6	9	15	15	41	40½	344	.24
Fishback	Grade Short-Horn	33	18	130	43	12	5	10	18	13	36	54	318	.24
Choctaw	Hereford	40	20	124	51	15	5	10	20	15	34	61	334	.23
Shadeland	Grade Hereford	37	18	99	54	15	6	9	19	16	44	34	317	.20
Ohio Belle	Grade Short-Horn	29	16	130	50	16	5	10	17	11	41	41½	325	.23
Robert	Hereford	35	16	96	50	12	5	9	14	12	38	32½	287	.23
Underidge	Short-Horn	32	21	131	55	17	6	9	19	12	41	62	343	.24
Prince	Hereford	37	21	129	48	16	6	11	17	25	37	26	347	.20
McCreskey	Grade Short-Horn	33	18	117	44	15	6	10	15	11	45	46½	314	.24
Quality	" "	32	19	165	51	15	6	8	22	13	45	70	376	.25
1884.. Average 11 animals		34	19	126	50	15	5	9½	17	15	39	45	329	.23
1883.. " 4 "		33	19	134	21	14½	3	9	17	......	45	32	327	.19
1882.. " 3 "		40	20	131	43	11	6	6	9	......	40	53	362	.24
1881.. " 2 "		35	18	111	46	12	5	9	17	11	44	28	......	.21
1880.. " 2 "		28	18	......	......	......	......	......	......	......	......	......	......	......

First premium Animals.

Name of Animal.	Breed.	Weight of head	Weight of feet	Weight of paunch	Weight of guts	Weight of liver	Weight of heart	Weight of tongue	Weight of lungs	Hide trimmings	Weight of blood	Loss of weight by shrinkage	Weight of unprofitable parts	Per ct. unprofitable wt. including shrinkage to gross or live weight
1884.. Abernethy	Grade Ab-Angus	30	20	144	49	15	6	9	15	15	41	40½	344	.24
1883.. Waterside Jock	Aberdeen-Angus	21	18½	142	22	18	3½	10½	17	......	49	21	333½	.18
1882.. Jay	Grade Hereford	43	23	148	48	15	5½	6	11	......	39	75	413½	.24
1881.. Echard	Grade Short-Horn	37	18	94½	40½	12½	5	......	......	......	......	......	......	.17
1880.. Blank	" "	28	20	......	......	......	......	......	......	......	......	......	......	......

DRESSED CARCASS—*Continued.*

Age 1 and under 2 years.

Name of Animal.	Breed.	Age in days	Average gain per day since birth	Weight at home	Live weight at slaughter.	Weight of dressed carcass or four quarters	Per cent. net carcass or quarters to gr. weight	Weight of carcass, hide and tallow	Per cent. of profitable weight (carcass, hide and tallow) to gross or live weight	Weight of tallow	Weight of hide	Weight of left fore quarter	Weight of right fore quarter	Weight of left hind quarter	Weight of right hind quarter
Quality	Grade Aberdeen-Angus	613	2 08	1,278	1,220	811	.66	938	.77	52	75	212	211	197	191
Deacon No. 2	Short-Horn-Jersey	621	1.79	1,111	1,110	696	.63	828	.74	60	72	183½	181	168	164
Redbud Nero	Grade Short-Horn	661	1.59	1,055	1,040	636	.61	724	.70	22	66	167	164	153	152
Orio	Short-Horn	597	2.50	1,495	1,470	955	.65	1,090	.74	52	83	245½	235	235½	239
Joseph	Grade Hereford	688	2 22	1,530	1,490	9·0½	.65	1,129½	.76	62	87	243½	247	250	240
Turley	Grade Short-Horn	530	2.05	1,090	1,110	653½	.59	786½	.71	64	69	166	166	163	158½
1884 Average 6 animals		618	2.04	1,260	1,240	789	.64	916	.74	52	75	203	201	194	191
1883 " 4 "		604	1.97	1,176	1,153	726	.62	898	.78	81	90	187	185	179	175
1882 " 3 "		601	2 04	1,248	1,193	769	.63	924	.77	73	81	194	193	192	188
1881 " 1 "		622	2.05	1,280	1,197	730	.60	883	.73	70	83	195	185	175	175
1880 " 1 "		643	1.93	1,265	1,217	816	.67	1,021	.83	121	84	206	203	203	203

First Premium Animals.

Name of Animal.	Breed.	Age in days	Average gain per day since birth	Weight at home	Live weight at slaughter.	Weight of dressed carcass or four quarters	Per cent. net carcass or quarters to gr. weight	Weight of carcass, hide and tallow	Per cent. of profitable weight (carcass, hide and tallow) to gross or live weight	Weight of tallow	Weight of hide	Weight of left fore quarter	Weight of right fore quarter	Weight of left hind quarter	Weight of right hind quarter
1884 Quality	Grade Aberdeen-Angus	613	2.08	1,278	1,220	811	.66	938	.77	52	75	212	211	197	191
1883 Harry	Hereford	713	1.97	1,405	1,369	888	.65	1,079	.79	84½	106½	230	228	218	212
1882 Red Major	Grade Short-Horn	715	2 23	1,585	1,540	1,028	.66	1,221	.79	97	96	250	257	257	255
1881 Bailey	Grade Hereford	622	2 05	1,280	1,197	730	.60	883	.73	70	83	195	185	175	175
1880 Monroe	Hereford-Short-Horn	643	1.93	1,265	1,217	816	.67	1,021	.83	121	84	206	203	203	203

DRESSED CARCASS—Age 1 and under 2 years—*Continued.*

	Name of Animal.	Breed.	Weight of head	Weight of feet	Weight of paunch	Weight of guts	Weight of liver	Weight of heart	Weight of tongue	Weight of lungs	Hide trimmings	Weight of blood	Loss of weight by shrinkage	Weight of unprofitable parts	Per ct. unprofitable wt. including shrinkage, to gross or live wt.
	Quality	Grade Aberdeen-Angus	25	16	91	40	12	5	7	14	10	30	32	250	.23
	Deacon No. 2	Short-Horn-Jersey	26	16	94	37	11	5	8	15	9	32	29	253	.26
	Redbud Nero	Grade Short-Horn	25	15	127	37	11	4	7	11	8	27	44	272	.30
	Orio	Short-Horn	31	21	138	40	14	6	10	17	16	30	57	323	.26
	Joseph	Grade Hereford	33	18	113	47	14	6	8	14	12	30	65½	295	.24
	Turley	Grade Short-Horn	23	17	116	51	12	6	7	13	8	29	41½	282	.29
1884..	Average 6 animals		27	17	113	42	12	5	8	14	10	30	45	279	.26
1883..	" 4 "		28	15½	101	17	11	3	8	13	......	34½	40	270	.23
1882..	" 3 "		28	15	92	30	11	4	5	9	......	33	39	269	.23
1881..	" 1 "		38	15½	87	37	13	5	8½	17	17	51½	35	......	.26
1880..	" 1 "		23	15	......	......	......	......	......	......	......	......	......	......	......

First Premium Animals.

	Name of Animal.	Breed.	Weight of head	Weight of feet	Weight of paunch	Weight of guts	Weight of liver	Weight of heart	Weight of tongue	Weight of lungs	Hide trimmings	Weight of blood	Loss of weight by shrinkage	Weight of unprofitable parts	Per ct. unprofitable wt. including shrinkage, to gross or live wt.
1884..	Quality	Grade Aberdeen-Angus	25	16	91	40	12	5	7	14	10	30	32	250	.23
1883..	Harry	Hereford	32½	18	101	18	13	3½	9½	14	......	35½	83	328	.24
1882..	Red Major	Grade Short-Horn	31	20	106	35	12	4	6	12	......	52	41	319	.21
1881..	Bailey	Grade Hereford	38	15½	87	37	13	5	8½	17	17	51½	25		.26
1880..	Monroe	Hereford-Short-Horn	23	15	......	......	......	......	......	......	......	......	......	......	......

DRESSED CARCASS—*Continued.*

Age under 1 year.

	Name of Animal.	Breed.	Age in days	Average gain per day since birth	Weight at home	Live wt. at slaughter.	Weight dressed carcass or four quarters	Per cent. net carcass or quarters to gross weight	Weight carcass, hide and tallow	Per cent. of profitable weight (of carcass, hide and tallow) to gross or live weight.	Weight tallow	Weight hide	Weight left fore quarter	Weight right fore quarter	Weight left hind quarter	Weight right hind quarter
	John Yeomans	Grade Hereford	325	2.97	965	930	562	.60	674	.73	36	76	140½	139½	142½	139½
1884	Average, 1 animal		325	2.97	965	930	562	.60	674	.73	36	76	140½	139½	142½	139½

First Premium Animal.

	Name of Animal.	Breed.	Age in days	Average gain per day since birth	Weight at home	Live wt. at slaughter.	Weight dressed carcass or four quarters	Per cent. net carcass or quarters to gross weight	Weight carcass, hide and tallow	Per cent. of profitable weight (of carcass, hide and tallow) to gross or live weight.	Weight tallow	Weight hide	Weight left fore quarter	Weight right fore quarter	Weight left hind quarter	Weight right hind quarter
1884	John Yeomans	Grade Hereford	325	2.97	965	930	562	.60	674	.73	36	76	140½	139½	142½	139½

DRESSED CARCASS—Age under 1 year—*Continued.*

Name of Animal.	Breed.	Weight of head	Weight of feet	Weight of paunch	Weight of guts	Weight of liver	Weight of heart	Weight of tongue	Weight of lungs	Hide trimmings	Weight of blood	Loss of weight by shrinkage	Weight of unprofitable parts	Per cent. unprofitable wt., including shrinkage, to gross or live weight
John Yeomans	Grade Hereford	21	15	97	41	11	3	7	12	7	30	12	244	.27
1884 Average, 1 animal		21	15	97	41	11	3	7	12	7	30	12	244	.27

First Premium Animal.

Name of Animal.	Breed.	Weight of head	Weight of feet	Weight of paunch	Weight of guts	Weight of liver	Weight of heart	Weight of tongue	Weight of lungs	Hide trimmings	Weight of blood	Loss of weight by shrinkage	Weight of unprofitable parts	Per cent. unprofitable wt., including shrinkage, to gross or live weight
1884 John Yeomans	Grade Hereford	21	15	97	41	11	3	7	12	7	30	12	244	.27

Average weights of the rings of the various breeds of Cattle and their crosses, exhibited at the 1878, 1879, 1880, 1881, 1883, 1883 and 1884 Fat-Stock Shows:

Breeds.	Steer 4 years old or over...	Steer, barren or spayed cow 3 years old and under 4 years.	Steer or spayed heifer 2 years old and under 3 years.	Steer or spayed heifer 1 year old and under 2 years.	Steer or spayed heifer under 1 year....	Cow 3 years old or over...
Short-Horn, 1878	2,262	2,087	1,621	1,385	....	1,723
Short-Horn, 1879	2,358	2,039	1,624	1,267	....	1,786
Short-Horn, 1880	....	2,172	1,801	1,590	....	1,618
Short-Horn, 1881	....	2,093	1,634	....	....	1,756
Short-Horn, 1882	....	2,141	....	1,288	....	1,808
Short-Horn, 1883	....	1,955	1,765	1,222	....	1,797
Short-Horn, 1884	....	1,981	1,738	1,261	....	....
Average	2,310	2,067	1,697	1,335	....	1,748
Hereford, 1878	2,010	1,735	1,470	....	....	1,630
Hereford, 1879	1,994	1,973	1,474	1,230	....	1,615
Hereford, 1880	....	1,875	1,738	1,115	....	1,720
Hereford, 1881	....	1,947	....	....	....	1,455
Hereford, 1882	....	1,765	1,626	1,330	....	1,672
Hereford, 1883	....	1,952	1,534	1,132	....	1,680
Hereford, 1884	....	1,817	1,405	1,287	....	....
Average	2,002	1,866	1,541	1,219	....	1,629
Aberdeen-Angus, 1883	....	2,355	1,815	....	....	1,703
Aberdeen-Angus, 1884	....	1,890	....	1,248	....	....
Average	....	2,122	1,815	1,248	....	1,703
Devon, 1878	1,757	1,565	....	....	....	1,200
Devon, 1879	....	1,509	....	844	....	1,115
Devon, 1880	....	1,220	1,250	....	....	....
Devon, 1881	....	1,152	977	792	....	....
Devon, 1882	....	....	....	....	....	....
Devon, 1883	....	....	....	....	....	....
Devon, 1884	....	....	....	....	....	....
Average	1,757	1,361	1,113	818	....	1,157
Holstein, 1883	....	....	....	....	....	1,645
Holstein, 1884	....	1,450	1,800	....	....	....
Average	....	1,450	1,800	....	....	1,645
Grades and Crosses, 1878	2,491	2,032	1,650	1,470	....	....
Grades and Crosses, 1879	2,373	1,946	1,710	1,307	....	....
Grades and Crosses, 1880	....	1,924	1,721	1,290	....	1,770
Grades and Crosses, 1881	....	1,943	1,675	1,288	....	1,722
Grades and Crosses, 1882	....	2,034	1,753	1,318	....	1,896
Grades and Crosses, 1883	....	2,152	1,762	1,239	....	2,005
Grades and Crosses, 1884	....	2,071	1,718	1,286	757	....
Average	2,432	2,014	1,713	1,314	757	1,848

Consolidated average weights of the rings of the various breeds of Cattle and their crosses, exhibited in 1878, 1879, 1880, 1882, 1883 and 1884.

Short-Horn	2,310	2,067	1,697	1,335	....	1,748
Hereford	2,002	1,866	1,541	1,219	....	1,629
Aberdeen-Angus	....	2,122	1,815	1,248	....	1,703
Devon	1,757	1,361	1,113	818	....	1,157
Holstein	....	1,450	1,800	....	....	....
Grades and Crosses	2,432	2,014	1,713	1,314	757	1,848

EARLY MATURITY.

From the foregoing table, giving the consolidated average weights of all the cattle of the several breeds of different ages exhibited at the Fat-Stock Shows of 1878, 1879, 1880, 1881, 1882, 1883 and 1884, the following table is prepared.

It is generally conceded that the best obtainable specimens of the several beef breeds have been exhibited at these shows, and until the results are changed at future shows, the public may find the following table of some value in determining the comparative feeding qualities as far as early maturity is concerned.

In the following table it will be seen that the Short-Horn steers have made the most rapid growth, and the weights of this breed, as given above, will be represented by one hundred as a basis for determining by percentage the comparative weights of the different breeds of cattle of same ages exhibited at the seven exhibitions of Fat Stock.

Breed.	Steer or spayed heifer 3 and under 4 years.	Steer or spayed heifer 2 and under 3 years.	Steer or spayed heifer 1 and under 2 years.	Cow 3 years old or over.......
Short-Horn	100	100	100	100
Hereford	90	91	91	93
Aberdeen-Angus	103	107	93	100
Devon	66	65	61	66
Holstein	70	106	....	94
Grades and Crosses	97	101	98	106

QUALITY.

The block is generally conceded to be the most conclusive test of the quality of meat.

The premiums awarded beef carcasses at Fat-Stock Shows to date are given in the following table.

The number of entries in the class and sweepstakes rings for dressed carcasses at the several shows are as follows: Hereford, 19; Grade Herefords, 40; Hereford-Short-Horns, 2; Short-Horns, 5; Grade Short-Horns, 26; Short-Horn-Jersey, 1; Grade Devon, 1; Aberdeen-Angus, 4; Grade Aberdeen-Angus, 2; making the per cent. of entries as follows: Herefords, nineteen per cent.; Grade Herefords, forty per cent.; Hereford-Short-Horns, two per cent.; Short-Horns, five per cent.; Grade Short-Horns, twenty-six per cent.; Short-Horn-Jersey one per cent.; Grade Devon, one per cent.; Aberdeen-Angus, four per cent.; Grade Aberdeen-Angus, two per cent.

In the table, each premium awarded dressed carcasses at the several shows in the class and sweepstakes rings is counted at 100 points for the convenience of making comparison:

Year.	Aberd'n-Angus.		Grade Ab.-Ang.		Hereford		Grade Hereford		Short-Horn.		Grade Sh't-H'n.	
	Per cent. of total entries..	Points scaled..	Per cent. of total entries..	Points scaled.	Per cent. of total entries..	Points scaled..	Per cent. of total entries..	Points scaled..	Per cent. of total entries..	Points scaled.	Per cent. of total entries..	Points scaled..
Steer or Spayed Heifer 3 and under 4 years.												
1834	10	....	....	....	10	....	20	....	30	100	30	....
1883	....	....	....	....	60	....	20	....	....	....	20	100
1882	....	....	....	....	20	100	60	....	....	....	20	....
1881	....	....	....	....	....	....	33⅓	100	....	....	66⅔	....
1880	....	....	....	....	33⅓	100	33⅓	....	....	....	33⅓	....
1879*	....	....	....	....	....	....	33⅓	100	....	....	33⅓	....
Steer or Spayed Heifer 2 and under 3 years.												
1884	....	....	9	100	37	....	9	....	9	....	36	....
1883	25	100	....	....	25	....	50	....	....	....	....	....
1882	....	....	....	....	....	....	100	100	....	....	....	....
1881	....	....	....	....	....	....	50	....	....	....	50	100
1880	....	....	....	....	....	....	50	....	....	....	50	100
Steer or Spayed Heifer 1 and under 2 years.												
1884	....	....	17	100	....	....	17	....	16	....	50	....
1883	....	....	....	....	25	100	75	....	....	....	....	....
1882	....	....	....	....	....	....	33⅓	....	....	....	66⅔	100
1881	....	....	....	....	....	....	100	100	....	....	....	....
1880	....	....	....	....	50	50	....	....	50	50	....	....
Steer or Spayed Heifer under 1 year.												
1884	....	....	....	....	100	100	....	....	....	....	....	....
Sweepstakes—all ages.												
1884	6.67	....	6.66	....	20.00	....	16.67	....	16.67	100	33.33	....
1883	7.69	....	....	....	38.46	....	46.16	....	....	....	7.69	100
1882	....	....	....	....	9 09	100	63.64	....	....	....	27.27	....
1881	....	....	....	....	7.15	....	42.85	100	7.15	....	42.85	....
Total	....	100	....	200	....	550	....	500	....	250	....	500

*33⅓ per cent. Grade Devon.

It will be seen that the honors in the slaughtering rings have been distributed among the various breeds of cattle, their grades or crosses, as follows: The Herefords receive 26 per cent. of all the prizes for dressed carcasses; Grade Herefords, 24 per cent.; Short-Horns, 12 per cent.; Grade Short-Horns, 24 per cent.; Aberdeen-Angus, 5 per cent.; Grade Aberdeen-Angus, 9 per cent.

The number of entries in the killing classes at the several Shows is as follows:

Entries of Steers 3 and under 4 years.

Year.	Sh't-Horns.	Herefords.	Ab.-Angus.	Grade Sh't-Horns.	Grade Herefords.	Grade Devons.
1879	....	....	....	1	1	1
1880	....	1	....	1	1	....
1881	....	....	....	2	1	....
1882	....	1	....	1	3	....
1883	....	3	....	1	1	....
1884	3	1	1	3	2	....

The premiums have been awarded on carcasses of steers 3 and under 4 years as follows: In 1884, Short-Horn steer Clarence Kirklevington, exhibited by Canada West Farm Stock Association, Brantford, Ont.; in 1883, grade Short-Horn steer Starlight, exhibited by J. H. Potts & Son, Jacksonville, Ill.; in 1882, Hereford steer Sir Richard, exhibited by M. H. Cochrane, Compton, Quebec, Can.; in 1881, grade Hereford steer Broad Horns, exhibited by C. M. Culbertson, Chicago; in 1880, Hereford steer Alex., exhibited by T. L. Miller, Beecher, Ill.; in 1879, grade Hereford steer Barney, exhibited by T. L. Miller, Beecher, Ill.

Entries of Steers 2 and under 3 years.

Year.	Short-Horn	Hereford.	Aberdeen-Angus.	Grade Short-Horn	Grade Hereford.	Grade Aberdeen-Angus.
1880	....	....	....	1	1	....
1881	....	....	....	1	1	....
1882	....	....	....	....	3	....
1883	....	1	1	....	2	....
1884	1	4	....	4	1	1

Premiums have been awarded carcasses of steers 2 and under 3 years of age, as follows: In 1884, grade Aberdeen-Angus steer Abernethy, exhibited by American Aberdeen-Angus Association, Independence, Mo.; in 1883, Aberdeen-Angus steer Waterside Jock, exhibited by M. H. Cochrane, Compton, Quebec; in 1882, grade Hereford steer Jay, exhibited by H. Norris & Son, Aurora, Ill.; in 1881, grade Short-Horn steer Echard, exhibited by David Grant, Petersburg, Ill.; in 1880, grade Short-Horn steer Blank, exhibited by J. D. Gillett, Elkhart, Ill.

Entries of Steers 1 and under 2 years.

Year.	Short-Horn.	Herefords.	Grade Short-Horn.	Grade Hereford.	Hereford-Short-Horn.	Short-Horn-Jersey.	Grade Aberde'n-Angus.
1880	....	....	....	....	1	....	....
1881	....	....	....	1	....	....	....
1882	....	....	2	1	....	....	....
1883	....	1	....	3	....	....	....
1884	1	....	2	1	....	1	1

Premiums have been awarded carcasses of steers 1 and under 2 years, as follows: In 1884, grade Aberdeen-Angus steer Quality, exhibited by M. H. Cochrane, Compton, Quebec; in 1883, Hereford steer Harry, exhibited by Fowler & VanNatta, Fowler, Ind.; in 1882, grade Short-Horn steer Red Major, exhibited by J. H. Potts & Son, Jacksonville, Ill.; in 1881, grade Hereford steer Bailey, exhibited by G. S. Burleigh, Mechanicsville, Iowa; in 1880, Hereford-Short-Horn steer Monroe, exhibited by G. S. Burleigh, Mechanicsville, Iowa.

Entries of Steers under 1 year.

Year.	Grade Heref'rd
1884	1

Premium awarded to grade Hereford steer Jno. Yeomans, exhibited by T. C. Ponting, Moweaqua, Ill.

Sweepstakes entries Carcass Prizes.

Year.	Short-Horn	Hereford	Aberdeen-Angus	Devon	Grade Short-Horn	Grade Hereford	Grade Devon	Hereford-Short-Horn	Short-Horn Jersey	Grade Aber-de'n-Angus
1881					3	3		1		
1882		1			3	7				
1883		5	1		1	6				
1884	5	6	2		9	5			1	2

Sweepstakes premiums have been awarded dressed carcasses, as follows: In 1884, Short-Horn steer Clarence Kirklevington, exhibited by Canada West Farm Stock Association, Brantford, Ont.; in 1883, grade Short-Horn steer Starlight, exhibited by J. H. Potts & Son, Jacksonville; in 1882, Hereford steer Sir Richard, exhibited by M. H. Cochrane, Compton, Quebec, Can.; in 1881, grade Hereford steer Broad Horns, exhibited by C. M. Culbertson, Chicago.

PRIZE RECORD.

The number of entries and number of prizes awarded cattle of the several breeds and their crosses or grades at the Fat-Stock Shows, in rings where all the breeds and their grades or crosses compete together, is given in the following tables:

The number of entries of the several classes of cattle is as follows: Short-Horns 129, Herefords 67, Devons 9, Aberdeen-Angus 11, Holsteins 2, Galloways 2, grade Short-Horns 742, grade Herefords 314, grade Aberdeen-Angus 8, grade Holstein 4, Hereford-Short-Horns 6, grade Devons 6, Hereford-Jersey 2, Short-Horn-Jersey 1, Short-Horn-Aberdeen-Angus 5, Hereford-Texan 1, Hereford-Aberdeen-Angus 1.

The per cent. of foregoing entries to the total number (1,310) is as follows: Short-Horns 9.85 per cent., Herefords 5.11 per cent., Aberdeen-Angus .84 per cent., Devons .68 per cent., Holsteins .15 per cent., Galloways .15 per cent., grade Short-Horns 56.64 per cent., grade Herefords 23.98 per cent., grade Aberdeen-Angus .61 per cent., grade Holsteins .30 per cent., Hereford-Short-Horns .46 per cent., grade Devons .46 per cent., Hereford-Jerseys .15 per cent., Short-Horn-Jersey .08 per cent., Short-Horn-Angus .38 per cent., Hereford Texan .08 per cent., Hereford-Angus .08 per cent.

The number of first and sweepstakes premiums awarded to the several breeds, their grades or crosses, in the rings specified in the table, is: Short-Horns 16, Herefords 7, Aberdeen-Angus 3, grade Short-Horns 61, grade Herefords 23, grade Aberdeen-Angus 2.

The per cent. of premiums awarded each class of cattle at the several shows, based on the foregoing figures, is as follows: Short-Horns 14, Herefords 6, Aberdeen-Angus 3, grade Short-Horns 55, grade Herefords 20, grade Aberdeen-Angus 2.

PRIZE RECORD.

	SHORT-HORN.		HEREFORD.		DEVON.		ABERDEEN-ANGUS.		HOLSTEIN.		GRADE SHORT-HORN.		GRADE HEREFORD.	
	No. entries	1st and sweepstakes premiums..........	No. entries	1st and sweepstakes premiums..........	No. entries ...	1st and sweepstakes premiums..........	No. entries	1st and sweepstakes premiums..........	No. entries	1st and sweepstakes premiums..........	No. entries	1st and sweepstakes premiums..........	No. entries	1st and sweepstakes premiums..........
Grades or Crosses.														
Steer or spayed heifer 3 and under 4..........											120	5	29	2
" " 2 " 3..........											138	6	35	1
" " 1 " 2..........											89	6	63	1
" " under 1 year											3		7	1
Cow three years old or over....................											8	4	1	
Sweepstakes.														
Steer or spayed heifer 3 and under 4..........	18	1	10		2		2	1			80	3	24	2
* " " 2 " 3..........	30	1	15	1	2		1				94	4	34	1
§ " " 1 " 2..........	21	1	12		1		2				58	5	34	1
" " under 1 year..........											3		6	1
Cow three years old or over	30	4	12	1	1		1		2		7	1	1	
Grand Sweepstakes		1										5		1
Early maturity, 3 and under 4....................	4	1	1	1							34	6	6	
" 2 " 3....................	9	1	3								34	4	10	2
† " 1 " 2....................	6	2			3		3	1			30	4	16	
" under 1 year											3	1	5	
Cost of production.														
Steer or spayed heifer 3 and under 4..........	3	1									4	2	2	
" " 2 " 3..........	1										5	1	2	1
" " 1 " 2..........	2	2									5		3	2
‡Dressed Carcass, 3 and under 4	3	1	8	3			1				9	1	17	2
" " 2 " 3	1		5	1			1	1			10	1	8	2
" " 1 " 2	1		1								8	2	10	2
" " under 1 year													1	1
Total	129	16	67	7	9		11	3	2		742	61	314	23

* Hereford-Short-Horn, 1. §Hereford-Short-Horn. †Hereford-Short-Horn, 1. ‡Hereford-Short-Horn, 2.

Prize Record—Continued.

	GRADE ABERD'EN-ANGUS.		GRADE HOLSTEIN.		GRADE DEVON.		HEREFORD SHORT-HORN.		HEREFORD JERSEY.		SHORT-HORN JERSEY.		SH'RT-HORN ABERDEEN-ANGUS.		HEREFORD TEXAN		GALLO-WAY.		HEREFORD ABERD'EN-ANGUS.	
	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums	No. entries	1st and sweep-stakes premiums
Grades or Crosses.																				
Steer or spayed heifer 3 and under 4							2													
" " 2 " 3	1		1				2						5							
" " 1 " 2	1		1						1						1					
" " under 1 year																				
Cow 3 years old or over																				
Sweepstakes.																				
Steer or spayed heifer 3 and under 4					4		1										2			
* " " 2 " 3	1																		1	
§ " " 1 " 2	1		1		1				1											
" " under 1 year																				
Cow 3 years old or over																				
Grand Sweepstakes																				
Early maturity, 3 and under 4							1													
" 2 " 3	1																			
† " 1 " 2	1		1																	
" under 1 year																				
Cost of Production.																				
Steer or spayed heifer 3 and under 4																				
" " 2 " 3																				
" " 1 " 2																				
‡Dressed Carcass, 3 and under 4																				
" " 2 " 3	1	1																		
" " 1 " 2	1	1			1						1									
" " under 1 year																				
Total	8	2	4		6		6		2		1		5		1		2		1	

* Hereford Short-Horn, 1. § Hereford Short-Horn, 2. † Hereford Short-Horn, 1. ‡ Hereford Short-Horn, 2.

	No. of entries...	Number 1st and Sweepstakes premiums awarded......	Per ct. of premiums awarded..	No. of premiums each breed should have received accord'g to No. of entries	Per ct. of premiums each breed should have received accord'g to No. of entries.	Per cent. of premiums awarded in proportion to entries.	
						Excess.	Deficit.
Short-Horn	129	16	14.29	11.029	9.849	4.441	....
Hereford	67	7	6.25	5.728	5.114	1.136	....
Devon.	9	....	....	0.769	0.687	....	0.687
Aberdeen-Angus	11	3	2.68	0.940	0 839	1.841	....
Holstein	2	....	....	0.171	0.153	....	0.153
Galloway	2	....	....	0.171	0.153	....	0.153
Grade Short-Horn	742	61	54.46	63.441	56.643	....	2.183
Grade Hereford	314	23	20.53	26.846	23.969	....	3 439
Short-Horn-Hereford	6	....	....	0.513	0.458	....	0.458
Grade Devon	6	....	....	0 513	0.458	....	0.458
Grade Angus	8	2	1.79	0.684	0 610	1.180	....
Grade Holstein	4	....	....	0 342	0 305	....	0 305
Hereford-Jersey	2	....	....	0.171	0 153	....	0.153
Short-Horn-Jersey	1	....	....	0.085	0.076	....	0.076
Short-Horn-Angus	5	....	....	0.427	0.381	....	0.381
Hereford-Texan	1	....	....	0.085	0.076	....	0.076
Hereford-Angus	1	....	....	0.085	0.076	....	0.076
	1,310	112	100.00	112.000	100.000	....	....

It will be seen from the above award of premiums by expert judges at the seven shows, if we take into consideration the number of entries of each class of cattle shown, that prestige is as follows:

First, Aberdeen-Angus (it having received 219.15 per cent. above its proportional amount); second, Grade Angus, (it having received 192.4 per cent. above its proportional amount); third, Short-Horn, (it having received 46.21 per cent. above its proportional amount); and fourth, Hereford, (it having received 22.21 per cent. above its proportional amount.)

If the 112 premiums awarded on the 1,310 entries represented in the above table, had been distributed in proportion to the number, the several classes would have received the per cent. of the first and sweepstakes premiums represented in the column so headed, and in the following order: Grade Short-Horn, Grade Hereford, Short-Horn, Hereford.

The last two columns show the per cent. of excess or deficiency in premiums awarded to each class of animals shown.

CLASS C—SHEEP.

Average weights in the rings of the various breeds of Sheep and their crosses, exhibited at the 1878, 1879, 1880, 1881, 1882, 1883 and 1884 Fat-Stock Shows:

Breed.	Wether 2 years old or over...	Wether 1 and under 2 years old..........	Wether under 1 year old ...	Ewe 2 years old or over.	Ewe 1 and under 2 years..	Ewe under 1 year old....
Cotswold, 1878		224		306		130
Cotswold, 1879	243	194	150	270	228	132
Cotswold, 1880	236	196	114	271		
Cotswold, 1881	251	194		244	226	121
Cotswold, 1882	274	203	136	274	253	125
Cotswold, 1883	267	213	202			
Cotswold, 1884	277	167	110			
Average	258	199	142	273	235	127
Other Long Wools, 1878						
Other Long Wools, 1879	266					113
Other Long Wools, 1880	281					111
Other Long Wools, 1881						
Other Long Wools, 1882	267	255	151	238	204	
Other Long Wools, 1883	271	224				
Other Long Wools, 1884	232					
Average	263	239	151	238	204	112
Southdown, 1878						
Southdown, 1879	178	160	94	171	128	100
Southdown, 1880	219	166	107	173	132	95
Southdown, 1881	195	157	193			
Southdown, 1882	206	194	114	165		
Southdown, 1883	228	176	97			
Southdown, 1884	207	178	109			
Average	205	172	119	169	130	97
Other Middle Wools, 1878						
Other Middle Wools, 1879	213			213	185	
Other Middle Wools, 1880		184			196	89
Other Middle Wools, 1881	226	181		220		
Other Middle Wools, 1882	230	175	94	202	240	85
Other Middle Wools, 1883	206	187	107			
Other Middle Wools, 1884	239	179	151			
Average	223	181	117	216	208	87
American Merino, 1878						
American Merino, 1879						
American Merino, 1880	139	112	75	99	78	
American Merino, 1881						
American Merino, 1882				104	69	52
American Merino, 1883	136	113	83			
Average	137	112	79	101	73	52
Other Fine Wools, 1878						
Other Fine Wools, 1879						
Other Fine Wools, 1880						
Other Fine Wools, 1881						
Other Fine Wools, 1882						
Other Fine Wools, 1883						
Average						
Grades or Crosses, 1878						
Grades or Crosses, 1879	213	177	128	215	160	125
Grades or Crosses, 1880	219	217	118	232	171	118
Grades or Crosses, 1881	231	169	117	164	164	104
Grades or Crosses, 1882	246	196	118	241	167	141
Grades or Crosses, 1883	217	202	110			
Grades or Crosses, 1884	202	168	117			
Average	221	188	118	213	165	122

Class C—Sheep—Continued.

Consolidated average weights of the rings of the various breeds of Sheep and their crosses, exhibited in 1878, 1879, 1880, 1881, 1882, 1883 and 1884.

Breed.	Wether 2 years old or over..	Wether 1 and under 2 years old..........	Wether under 1 year old ...	Ewe 2 years old or over..	Ewe 1 and under 2 years..	Ewe under 1 year old....
Cotswold	258	199	142	273	235	127
Other Long Wools	263	239	151	238	204	112
Southdown	205	172	119	169	130	97
Other Middle Wools	223	181	117	211	208	87
American Merino	137	112	79	101	73	52
Grades or Crosses	221	188	118	213	165	122

EARLY MATURITY.

WETHER SHOWING MOST RAPID GROWTH.

Wether 2 and under 3 years.

Year.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1879	Leicester	969	300	0.31
1880	Leicester	971	282	0.29
1881	Cotswold	933	281	0.30
1882	Cotswold	966	292	0.30
1883				
1884				

Wether 1 and under 2 years.

1878	Cotswold	535	220	0.41
1879	Cotswold	574	218	0.38
1880	Grade Oxford	612	232	0.38
1881	Cotswold	568	205	0.36
1882	Leicester	600	295	0.49
1883				
1884				

Wether under 1 year.

1878	Cotswold	170	152	0.89
1879	Cotswold	240	150	0.62
1880	Cotswold	210	114	0.54
1881	Southdown	213	193	0.90
1882	Leicester	235	178	0.75
1883	Cotswold	218	192	0.88
1884	Southdown	167	112	0.67

DRESSED CARCASS.

Wether 2 years or over.

Name of Animal.	Breed.	Age in days.	Live weight at slaughter	Weight of dressed carcass	Per cent. net carcass to gross or live weight	Weight of pelt	Weight of tallow	Per cent. carcass, pelt and tallow to gross weight	Weight of head	Weight of lungs and heart	Weight of liver and melt	Weight of paunch and intestines	Weight of blood	Shrinkage	Per ct. offal and shrinkage to live weight
Harry	Shropshire	946	225	127	.56	28	3½	.70	6	4	3	39	7	7½	.30
Model	"	976	272	186½	.68	23½	8	.80	6	3	2	29	8	6	.20
1884 Average, 2 animals		961	248	157	.63	26	6	.76	6	3	2	34	7	7	.24
1883.. " 2 "		945	196	131	.66	17	7½	.79	5	3	2	20½	8½	2½	.21

First Premium Animals.

Name of Animal.	Breed.	Age in days.	Live weight at slaughter	Weight of dressed carcass	Per cent. net carcass to gross or live weight	Weight of pelt	Weight of tallow	Per cent. carcass, pelt and tallow to gross weight	Weight of head	Weight of lungs and heart	Weight of liver and melt	Weight of paunch and intestines	Weight of blood	Shrinkage	Per ct. offal and shrinkage to live weight
1884.. Model	Shropshire	976	272	186½	.68	23½	8	.80	6	3	2	29	8	6	.20
1883.. Quality	"	952	148	91½	.62	13½	6	.75	4	3	2	20	6	2	.25

Wether 1 and under 2 years.

Name of Animal.	Breed.	Age in days.	Live weight at slaughter	Weight of dressed carcass	Per cent. net carcass to gross or live weight	Weight of pelt	Weight of tallow	Per cent. carcass, pelt and tallow to gross weight	Weight of head	Weight of lungs and heart	Weight of liver and melt	Weight of paunch and intestines	Weight of blood	Shrinkage	Per ct. offal and shrinkage to live weight
Jack	Grade Hampshire	555	145	88½	.61	10	4	.71	5	2	3½	19	5	8	.29
Erwin	Southdown	669	185	116	.63	18	3½	.74	5	3	2	29½	3	5	.26
Jack	Cotswold-Southdown	575	171	99	.58	19	6	.72	5	3½	3	29½	5½	½	.28
Jack	Grade Southdown	597	185	116	.63	18½	8	.77	5	2½	2	22	5½	5½	.23
1884.. Average, 4 animals		599	171	105	.61	16	5	.74	5	3	3	25	5	4	.26
1883.. " 2 "		574	199	122½	.62	21	9	.77	5	3	2	24½	9	3	.23

First Premium Animals.

	Name of Animal.	Breed.	Age in days	Live weight at slaughter	Weight of dressed carcass	Per cent. net carcass to gross or live weight	Weight of pelt	Weight of tallow	Per cent. carcass, pelt and tallow to gross weight	Weight of head	Weight of lungs and heart	Weight of liver and melt	Weight of paunch and intestines	Weight of blood	Shrinkage	Per ct. offal and shrinkage to live weight
1884..	Jack	Grade Southdown	597	185	116	.63	18½	8	.77	5	2½	2	22	5½	5½	.23
1883..	Hero	Cotswold	583	193	113	.58	23½	6	.74	5½	3	2	29	9	2	.26

Wether 1 and under 2 years.

	Name of Animal.	Breed.	Age in days	Live weight at slaughter	Weight of dressed carcass	Per cent. net carcass to gross or live weight	Weight of pelt	Weight of tallow	Per cent. carcass, pelt and tallow to gross weight	Weight of head	Weight of lungs and heart	Weight of liver and melt	Weight of paunch and intestines	Weight of blood	Shrinkage	Per ct. offal and shrinkage to live weight
	Stonington	Cotswold	185	97	49½	.51	14	3	.69	3½	2	1½	15½	3½	4½	.31
	Harry	Southdown	151	112	64½	.57	13	4	.73	3½	2	1	15½	3	5½	.27
1884..	Average, 2 animals		168	104	57	.55	13½	3½	.71	3½	2	1	15½	3	5	.29
1883..	" 3 "		198	114	64	.57	14	3	.71	3½	2	2	16½	6	3	.29

First Premium Animals

	Name of Animal.	Breed.	Age in days	Live weight at slaughter	Weight of dressed carcass	Per cent. net carcass to gross or live weight	Weight of pelt	Weight of tallow	Per cent. carcass, pelt and tallow to gross weight	Weight of head	Weight of lungs and heart	Weight of liver and melt	Weight of paunch and intestines	Weight of blood	Shrinkage	Per ct. offal and shrinkage to live weight
1884..	Harry	Southdown	151	112	64½	.57	13	4	.73	3½	2	1	15½	3	5½	.27
1883..	Curly	Oxford-Cotswold	200	121	70½	.58	15	4	.74	3½	2	1½	16	6	2½	.26

CLASS D—SWINE.

Average weights of the rings of the various breeds of Hogs and their crosses exhibited at the 1878, 1879, 1880, 1881, 1882, 1883 and 1884 Fat-Stock Shows:

Breed.	Barrow 2 years old or over...	Barrow 1 and under 2 years.	Barrow under 1 yr. and over 6 months.....	Barrow under 6 months	Sow 2 years old or over	Sow 1 and under 2 yrs. old.	Sow under 1 year and over 6 months	Sow under 6 months......
Berkshire, 1878						452		
Berkshire, 1879		469		190	635	510	351	162
Berkshire, 1880						446		
Berkshire, 1881		428				463		
Berkshire, 1882		408	260			425	372	
Berkshire, 1883		427	370					
Berkshire, 1884		415						
Average		429	315	190	635	459	361	162
Poland China, 1878	651	501	379	192	577			203
Poland China, 1879	745	521	330	193	624	484	339	147
Poland China, 1880		490	272			445	263	
Poland China, 1881		520				557	306	
Poland China, 1882		455	298			466	326	
Poland China, 1883		420	282					
Poland China, 1884		448	229					
Average	698	479	298	192	600	488	308	175
Chester White, 1878	644							
Chester White, 1879								
Chester White, 1880		248				381	287	
Chester White, 1881		385				307	246	
Chester White, 1882		556	280			473	342	
Chester White, 1883		544	385					
Chester White, 1884								
Average	644	433	333			387	291	
Victoria, 1882		446	350			461	220	
Victoria, 1883		422	330					
Victoria, 1884		402	200					
Average		423	293			461	220	
Duroc Jersey Red, 1882		504	335			405	320	
Duroc Jersey Red, 1883		483	354					
Duroc Jersey Red, 1884		473	428					
Average		487	372			405	320	
Essex, 1878						476		
Essex, 1879	472	295		162	440	276	317	153
Essex, 1880								
Essex, 1881				212		366	216	
Essex, 1882		437	228			405	230	
Essex, 1883		416	285					
Essex, 1884		509	313					
Average	472	414	275	187	440	379	254	153
Other Small Breeds, 1878								
Other Small Breeds, 1879						410	370	
Other Small Breeds, 1880								
Other Small Breeds, 1881								
Average						410	370	

Class D—Swine—Continued.

Breed.	Barrow 2 years old or over...	Barrow 1 and under 2 years.	Barrow under 1 year and over 6 months....	Barrow under 6 months....	Sow 2 years old or over...	Sow 1 and under 2 years old	Sow under 1 year and over 6 months....	Sow under 6 months......
Yorkshire, 1884	....	....	313	....	....	....	....	....
Suffolk, 1884	....	310	189	....	....	....	....	....
Grades and Crosses, 1878	....	522	298	....	....	....	....	....
Grades and Crosses, 1879	589	436	361	....	620	478	365	....
Grades and Crosses, 1880	....	490	350	....	....	306	353	....
Grades and Crosses, 1881	....	410	326	....	....	460	319	....
Grades and Crosses, 1882	....	477	326	....	....	404	320	....
Grades and Crosses, 1883	....	456	283	....	....	....	....	....
Grades and Crosses, 1884	....	444	385	....	....	....	....	....
Average	589	462	333	....	620	412	346	....

Consolidated average weights of rings of the various breeds of Hogs and their crosses exhibited in 1878, 1879, 1880, 1881, 1882, 1883 and 1884.

Berkshire	....	429	315	190	635	459	361	162
Poland China	698	479	298	192	600	488	308	175
Chester White	644	433	333	....	....	387	291	....
Victoria	....	423	293	....	....	461	220	....
Duroc Jersey Red	....	487	372	....	....	405	320	....
Essex	472	414	275	187	440	379	254	153
Yorkshire	....	....	313	....	....	....	....	....
Suffolk	....	310	189	....	....	....	....	....
Grades and Crosses	589	462	333	....	620	412	346	....

EARLY MATURITY.

BARROWS SHOWING MOST RAPID GROWTH.

Barrow 1 and under 2 years.

Year.	Breed.	Age in days.	Weight.	Average gain per day in lbs. since birth.
1878	Suffolk Cross	439	522	1.19
1879	Grade Suffolk	431	473	1.09
1880	Poland China	467	483	1.03
1881	Poland China	385	444	1.15
1882	Jersey Red	416	533	1.28
1883	....	....	....	....
1884	....	....	....	....

Barrow under 1 year.

1878	Poland China	158	203	1.28
1879	Poland China	237	334	1.40
1880	Poland China	185	217	1.17
1881	Essex	177	207	1.16
1882	Chester White	200	280	1.40
1883	Grade Victoria	189	277	1.46
1884	Duroc Jersey Red	350	370	1.00

Dressed Swine.

Barrow 12 and under 18 months.

	Name and Postoffice of Exhibitor.	Name of Animal.	Breed.	Age in days	Live weight at slaughter	Weight dressed carcass and head	Per ct. carcass and head to gross weight	Weight lungs and heart	Weight liver and melt	Weight paunch	Weight guts	Weight blood	Weight hair, wet	Shrinkage	Per cent. offal, including shrinkage, to gross weight
	Adam Donaldson, Pleasant Valley, Ia	Commodore	Grade Duroc	547	680	583	.86	6½	6	9	36	9½	5½	24½	.14
	Jam Goodman, Leon, Ia	Big Abe	Poland China	533	550	477½	.87	7	5	7½	24	6½	7	15½	.13
	Geo. F. Davis & Co., Dyer, Ind	Prince	Victoria	472	405	348	.86	4½	4	5½	19½	5½	7	11	.14
	G. W. Stoner, La Place	Hudson	Duroc Jersey Red	485	389	317	.81	5	5½	8	26	5	6	17	.19
	Stone & Loake, Stonington	Josoto Chief	Poland China	532	580	507½	.87	4½	7	8½	23	8½	6	15	.13
	J. A. Countryman, Rochelle	Blaine	" "	417	410	357	.87	4	3	3½	16	3½	5	18	.13
	Frank Wilson, Jackson, Mich	Jerry	Suffolk	405	270	224	.83	3½	3½	8½	17	4	4	5½	.17
1884	Average 7 animals			484	469	402	.86	5	5	7	23	6	6	15	.14
1883	" 5 "			465	432	375	.88	4	4	7	19	6	3	14	.12
1882	" 3 "			486	477	412	.86	3	4	3	17	6	5	27	.14

First Premium Animals.

1884	Stone & Loake	Josoto Chief	Poland China	532	580	507½	.87	4½	7	8½	23	8½	6	15	.13
1883	Taylor Bros	Andy	Chester White	....	....	....	....	....	....	....	....	....	....	....	....
1882	Scheidt & Davis	Bouncer	Victoria	539	579	505	.87	4	4½	2	18½	8	5½	31½	.13

Barrow under 1 year old.

Name and Postoffice of Exhibitor.	Name of Animal.	Breed.	Age in days	Live weight at slaughter	Weight dressed carcass and head	Per ct. carcass and head to gross weight	Weight lungs and heart.	Weight liver and melt	Weight paunch	Weight guts	Weight blood	Weight hair, wet	Shrinkage	Per cent. offal, including shrinkage, to gross weight
Adam Donaldson, Pleasant Valley, Ia.	Red Boy	Duroc-J'rs'y Red	341	420	360	.86	4½	5	7	24	6	8½	5	.14
Stone & Loake, Stonington	Perfection	Berkshire-Vict'a.	306	400	353½	.88	4	5	5	17	4½	6	5	.12
L. C. Henley, Mattoon.	John	Yorkshire	357	331	291	.88	3	2	2½	15	7½	4	6	.12
Geo. F. Davis & Co., Dyer, Ind	Beauty	Victoria	160	180	151	.84	2	3	4	12	3	2	3	.16
J. A. Countryman, Rochelle	X L.	Poland China	235	255	216	.85	2½	3	3	13	2	3	12½	.15
Frank Willson, Jackson, Mich	Walter	Essex,	318	450	308	.88	3½	4½	4½	16	4	3½	6	.12
1884.. Average 6 animals			286	323	280	.87	3	3½	4	16	4½	4½	8½	.13
1883.. " 6 "			259	275	232	.84	3	4	3	16	5	3	9	.16
1882. " 3 "			281	316	272	.86	3	4	2	13	4	3	15	.14

First Premium Animals.

1884.. L. C. Henley, Mattoon	John	Yorkshire	357	331	291	.88	3	2	2½	15	7½	4	6	.12
1883.. R. J. Stone, Stonington	Fatty	Victoria	251	295	258	.88	2	3	2½	13½	5½	4	6½	.12
1882.. Scheidt & Davis, Dyer, Ind	Dick	"	322	380	330	.87	3	4	2	16	4	2½	18½	.13

ROLL OF HONOR.

The following table gives the ages from month to month and weight of noted steers exhibited at the seven Fat-Stock Shows (nearest the ages named) that have made the largest average gain per day, including weight at birth.

The largest average gain per day made by the representative animals named in the following list, makes it proper that special attention should repeatedly be called to these remarkable results in feeding, as well as skill in breeding animals of such unusual aptitude for rapid growth.

The forty animals named in the table represent the seven Fat-Stock Shows as follows: 1878, two steers; 1879, six steers; 1880, four steers; 1881, five steers; 1882, five steers; 1883, eleven steers; 1884, seven steers.

The number of each of the various breeds and crosses included in the table is as follows: Short-Horns, 9; grade Short-Horns, 22; grade Herefords, 7; Hereford-Short-Horn, 1; Aberdeen-Angus, 1.

The breeders of the several States are represented as follows: Illinois, 27 steers; Indiana, 4; Ohio, 2; Kentucky, 3; Canada, 2; Iowa, 1; Nebraska, 1.

Roll of Honor.

No. of months, 30 days each.	No. days	Age of steer in days nearest to time named.	Breed.	Weight.	Average gain per day in pounds.	Exhibited.		Name of Animal.
						Year.	By—	
			Steer under 1 year.					
5	150	138	Grade Short-Horn	385	2.78	1884	John D. Gillett	Justine
8	240	251	Grade Hereford	810	3.22	1883	B. Hershy	Prospect
9	270	262	" "	725	2.77	1883	J. R. Price	Confidence
10	300	290	" "	855	2.95	1883	Fowler & Van Natta.	Dandy Boy
			Steer 1 and under 2 years.					
12	360	381	Grade Short-Horn	1,045	2.74	1883	Cobb & Phillips	Arthur
13	390	384	Short-Horn	1,140	2.97	1882	" "	Cassius V
14	420	410	Aberdeen-Angus	1,125	2.74	1884	Indiana Blooded Stock Co	Blaine
15	450	454	Grade Short-Horn	1,230	2 70	1882	John D. Gillett	Waixel
16	480	480	Grade Hereford	1,152	2.40	1879	T. L. Miller	Putnam
17	510	513	Grade Short-Horn	1,373	2.67	1879	John D. Gillett	Jim Smith
18	540	544	" "	1,401	2.57	1879	"	Albert Pell
19	570	564	" "	1,286	2.46	1879	Amos F. Moore	Hawks
20	600	597	Short-Horn	1,495	2 50	1884	B. Waddel	Orio
21	630	630	Grade Short-Horn	1,640	2.60	1883	John G. Imboden	Scratch
22	660	650	Short-Horn	1,480	2.28	1878	J. N. Brown's Sons	Duke Sangamon
23	690	688	Grade Short-Horn	1,880	2.73	1880	John D. Gillett	Porter
			Steer 2 and under 3 years.					
24	720	719	Grade Short-Horn	1,565	2.17	1881	J. H. Potts & Son	Major
25	750	765	" "	1,615	2.11	1883	J. R. Peak & Son	Joe
26	780	783	Short-Horn	1,635	2.09	1881	J. D. Gillett	Chance
27	810	816	Grade Short-Horn	1,750	2.14	1883	"	Cherry
28	840	832	Grade Hereford	1,845	2.21	1880	T. L. Miller	Conqueror
29	870	858	Grade Short-Horn	2,220	3.59	1882	J. D. Gillett	Mammoth
30	900	902	Grade Hereford	1,855	2.05	1884	Fowler & Van Natta	McGregor
31	930	940	Grade Short-Horn	1,975	2 10	1880	J. D. Gillett	Blood
32	960	964	" "	1,940	2.01	1881	"	Cherry
33	990	977	" "	2,081	2.12	1879	"	Barney
34	1,020	1,009	Short-Horn	2,045	2 02	1883	Canada W. F. S. Ass'n	Clarence Kirklevington
35	1,050	1,054	Grade Short-Horn	2,070	1.96	1883	John Ross & Son	Christmas King

			Steer 3 and under 4 years.					
36	1,080	1,084	Short-Horn	1,950	1.79	1878	VanMeter & Hamilton	Young Mary Steer 8th
37	1,110	1,105	Grade Short-Horn	1,855	1.67	1881	Morrow & Muir	Frosty
38	1,140	1,132	" "	2,024	1.76	1879	J. D. Gillett	Cap. Nels. Morris
39	1,170	1,176	" "	2,130	1.81	1881	"	Phil. Sheridan
40	1,200	1,210	Short-Horn	2,202	1.82	1884	T. W. Harvey	Snow Flake
41	1,230	1,222	Grade Short-Horn	2,445	2.00	1883	J. D. Gillett	Mammoth
42	1,260	1,265	" "	2,400	1.90	1882	H. & I. Goff	Canadian Champion
43	1,290	1,301	Grade Hereford	2,300	1.76	1884	Fowler & VanNatta	Benton's Champion
44	1,320	1,305	Short-Horn	2,535	1.94	1882	J. B. Sherman	Sangamon
45	1,350	1,351	Short-Horn-Hereford	2,295	1.75	1884	J. H. Graves	Nichols
46	1,380	1,367	Short-Horn	2,350	1.71	1880	Wm. Sandusky	Vermilion
47	1,410	1,416	Grade Short-Horn	2,180	1.54	1883	J. H. Potts & Son	Starlight

CLASS A—CATTLE.

Table giving number of entries of Cattle of the several ages and breeds, including grades and crosses, exhibited at the 1878, 1879, 1880, 1881, 1882, 1883 and 1884 Fat-Stock Shows:

Cattle.	Short-Horn	Hereford	Devon	Aberdeen-Angus	Holstein	Grades or Crosses	All Breeds and Grades by ages	Sweepstakes	Grand Sweepstakes	Pen of Cattle	Dressed Bullocks	Heaviest Fat Steer	Gain per day	Cost of Production	Total
Steer 4 years old or over.															
1878	2	1	2	....	....	12	....	14	....	....	....	....	....	....	31
1879	5	4	1	....	....	13	....	19	....	2	..	....	....	....	51
Steer 3 and under 4 years.															
1878	2	3	2	....	....	10	....	8	....	2	....	....	....	....	27
1879	2	2	1	....	....	29	....	20	....	3	....	....	....	....	57
1880	4	1	2	....	....	18	....	18	....	2	3	....	10	....	58
1881	3	2	2	....	....	34	....	25	....	4	3	....	10	..	83
1882	5	1	....	....	....	24	....	20	....	4	5	....	11	2	72
1883	3	4	....	1	....	16	....	25	....	2	8	....	7	1	67
1884	9	2	....	1	1	22	29	4	....	4	10	....	11	....	93
Steer 2 and under 3 years.															
1878	5	1	....	....	....	12	....	13	....	2	....	....	....	....	33
1879	4	1	....	....	....	31	....	21	....	3	....	....	....	....	60
1880	5	3	1	....	....	20	....	22	....	1	2	....	10	....	64
1881	7	....	3	....	....	33	....	27	....	2	2	....	10	....	84
1882	....	3	....	....	....	19	....	17	....	3	3	....	8	3	56
1883	3	4	....	1	....	20	....	29	....	2	4	....	11	4	78
1884	11	8	....	....	1	47	52	4	....	12	11	....	18	....	164
Steer 1 and under 2 years.															
1878	3	....	....	....	....	2	....	5	....	....	....	....	....	....	10
1879	6	3	1	....	....	14	....	14	....	1	....	....	....	....	39
1880	1	1	....	....	....	22	....	15	....	1	1	....	10	....	51
1881	....	....	....	....	....	5	....	6	....	....	1	....	8	....	20
1882	3	1	....	....	....	17	....	13	....	1	3	....	12	4	54
1883	9	7	....	1	....	70	....	58	....	5	6	....	15	6	177
1884	9	4	....	4	....	27	28	3	....	4	6	....	16	....	101
Steer under 1 year.															
1884	....	....	....	....	....	10	9	1	....	....	1	....	8	....	29
Cow 3 years old or over.															
1878	6	3	1	....	....	....	....	6	....	....	....	....	....	....	16
1879	8	2	2	1	....	1	....	10	....	....	....	....	....	....	24
1880	3	1	....	....	....	1	....	5	....	....	1	....	....	....	11
1881	4	3	3	....	....	2	....	8	....	....	....	....	....	....	20
1882	8	2	....	....	....	3	....	9	....	....	....	....	....	....	22
1883	6	5	....	3	....	3	....	16	....	....	6	....	....	....	39
1884	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
All ages.															
1878	....	....	....	....	....	....	....	....	21	....	....	....	....	....	21
1879	....	....	....	....	....	....	....	....	63	....	....	....	....	....	63
1880	....	....	....	....	....	....	....	....	58	....	....	13	....	....	71
1881	....	....	....	....	....	....	....	....	30	....	....	10	....	....	40
1882	....	....	....	....	....	....	....	....	27	....	....	7	....	....	34
1883	....	....	....	....	....	....	....	....	89	....	....	8	....	....	97
1884	....	....	....	....	....	....	....	....	13	....	30	4	....	....	47
Total.															
1878	18	8	5	....	....	36	....	46	21	4	....	....	....	....	138
1879	25	12	5	1	....	88	....	84	63	9	..	7	....	....	303
1880	13	6	3	....	....	61	....	60	58	4	7	13	30	....	255
1881	14	5	8	....	....	74	....	66	30	6	6	10	28	....	247
1882	16	7	....	....	....	63	....	59	27	8	11	7	31	9	238
1883	21	20	....	6	....	109	....	28	89	9	24	8	33	11	458
1884	29	14	....	5	2	106	118	12	13	20	58	4	53	....	434

CLASS C—SHEEP.

Table giving number of entries of Sheep of the several ages and breeds, including grades and crosses, exhibited at the 1878, 1879, 1880, 1881, 1882, 1883 and 1884 Fat-Stock Shows.

Sheep.	Cotswold	Leicester and Lincoln	Other long wools	Southdown	Other downs	American Merino	Other fine wools	Grades or Crosses	Sweepstakes	Gr'nd sweepstak's	Pen wethers	Dressed carcass	Heaviest fat sheep	Gain per day	Total
Wether 2 years old or over—															
1878															
1879	5		2	10	4			18	21						60
1880	5		1	9		1		7	14		2	3			42
1881	5			5	2			2	10		2				26
1882	5		3	3	3			5	10		1				30
1883	8		2	2	6	6		6	15		3	2			50
1884	2	1		7	5			6	4		4	2			31
Wether 1 and under 2 years—															
1878	1								2						3
1879	5			8				12	12						37
1880	2			5	2	2		4	11			3			26
1881	3			5	2			4	9						23
1882	4		2	3	1			4	9						23
1883	6		3	4	5	3		8	11			2			42
1884	1			7	4			12	4		4	4			36
Wether under 1 year—															
1878	2														2
1879	1			2				4	6						13
1880	1			1		1		3	4						10
1881				2				3	5						10
1882	1		2	3	1			3	6						16
1883	4		1	2	2	3		9	12			3			36
1884	1			3	1			6	3			2			16
Ewe 2 years old or over—															
1878	3								4						7
1879	16			8	2			10	22						58
1880	1			2		2		1	4						10
1881	1			1				1	3						6
1882	3		1	1	3	4		3	6						21
1883															
Ewe 1 and under 2 years—															
1878									1						1
1879	13			2	1			4	16						36
1880				2	1	2		1	4						10
1881	7							4	6						17
1882	1		1		5	1		4	4						16
1883															
Ewe under 1 year—															
1878									2						2.
1879	4		1	1				2	5						13
1880			1	2	1			3	4						11
1881	5							6	8						19
1882	1				1	1		3	3						9
1883															
All ages—															
1878										9					9
1879										49					49
1880										19			7		26
1881										14			6		20
1882										23			7		30
1883										19			6	6	31
1884										3			2	3	8
Total entries—															
1878	6								9	9					24
1879	44		3	31	7			50	82	49	2				284
1880	9		2	21	4	8		19	41	19	2	3	7		138
1881	21			13	4			20	41	14	2		6		121
1882	15		9	10	14	6		22	38	23	1		7		145
1883	18		6	8	13	12		23	38	19	3	7	6	6	159
1884	4	1		17	10			24	11	3	8	8	2	3	91

CLASS D—SWINE.

Table giving number of entries of Swine of the several ages and breeds, including grades and crosses, exhibited at the 1878, 1879, 1880, 1881, 1882, 1883 and 1884 Fat-Stock Shows.

Swine.	Berkshire	Poland China	Chester White	Victoria	Duroc or Jersey Red	Essex	Yorkshire	Suffolk	Other small breeds.	Grades or Crosses.	Sweepstakes	Grand Sweepstakes	Pen Barrows	Heaviest fat Hog	Dressed carcass	Gain per day	Total
Barrow 2 years old or over—																	
1878	..	2	1	..	..	..	..	..	..	..	4	..	..	..	..	..	7
1879	..	2	..	..	..	2	..	..	..	..	3	..	..	..	..	..	7
1880	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
1881	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
1882	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
1883	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Barrow 1 year old and under 2 years—																	
1878	..	2	..	..	..	..	..	..	..	1	7	..	..	..	..	..	10
1879	5	6	.	..	..	2	..	..	..	2	15	..	..	..	..	..	30
1880	..	3	..	..	..	..	..	..	..	3	5	..	..	..	..	..	11
1881	1	3	1	..	..	..	..	..	..	1	7	..	..	..	..	..	13
1882	3	13	3	2	3	4	..	..	..	5	23	..	3	..	3	..	61
1883	4	13	3	9	5	4	..	..	..	11	23	..	4	..	5	..	82
1884	1	14	..	3	5	1	..	3	..	8	7	..	5	..	7	..	54
Barrow 6 months old and under 1 year—																	
1878	..	3	..	..	..	..	..	..	..	2	5	..	..	..	..	..	10
1879	..	4	..	..	..	..	..	..	..	2	7	..	..	..	..	..	13
1880	..	2	2	..	..	..	..	..	..	2	3	..	..	..	..	..	9
1881	..	..	..	..	..	3	..	..	..	2	5	..	..	..	..	..	10
1882	1	2	1	3	2	4	..	..	..	1	10	..	..	..	3	..	27
1883	2	6	1	6	1	3	..	..	..	4	18	..	..	..	6	..	48
1884	..	3	..	1	3	3	3	3	..	2	6	..	3	..	6	..	33
Barrow under 6 months old—																	
1878	..	1	..	..	..	..	..	..	..	..	3	..	..	..	..	..	4
1879	5	2	..	..	..	1	..	..	..	..	7	..	..	..	..	..	15
1880	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
1881	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
1882	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
1883	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Sow 2 years old or over—																	
1878	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
1879	1	3	..	..	..	3	..	..	..	3	8	..	..	..	..	..	18
1880	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
1881	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
1882	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
1883	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	....
Sow 1 and under 2 years—																	
1878	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	4
1879	1	3	..	..	..	2	..	..	..	2	3	..	..	..	..	..	11
1880	1	1	1	..	..	..	..	..	..	2	3	..	..	..	..	..	8
1881	1	1	1	..	..	2	..	..	..	2	7	..	..	..	..	..	15
1882	1	7	3	1	1	2	..	..	..	1	11	..	..	..	..	..	27
1883	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....

Class D—Swine—Continued.

Swine.	Berkshire	Poland China	Chester White	Victoria	Duroc or Jersey Red	Essex	Yorkshire	Suffolk	Other small breeds	Grades or Crosses	Sweepstakes	Grand Sweepstakes	Pen barrows	Heaviest fat Hog	Dressed carcass	Gain per day	Total
Sow 6 months old and under 1 year—																	
1878																	
1879	3	3							4	1	8						19
1880		3	2							2	5						12
1881		2	2			3				4	7						18
1882	2	4	2	1	1	4					9						23
1883																	
Sow under 6 months old—																	
1878		1															1
1879	3	1				2					6						12
1880																	
1881																	
1882																	
1883																	
Total—																	
1878	2	11	1			1				3	19	13					50
1879	18	24				12			4	10	57	16	1				142
1880	1	9	5							9	16	14		2			56
1881	3	6	4			8				9	26	16		10			82
1882	7	26	8	7	7	14				7	53	42	3	5	6		185
1883	6	19	4	15	6	7				17	41	26	4	7	11	13	174
1884	1	17		4	8	4	3	6		10	13	2	8	5	13	7	101

1878.

State.	CATTLE.		SHEEP.		HOGS.	
	No. entries	Amount premiums paid.	No. entries	Amount premiums paid.	No. entries	Amount premiums paid.
Illinois	83	$1,320	6	$100	36	$340
Kentucky	26	145				
Missouri	13					
Indiana	9	65			9	50
Iowa	6	25				
Wisconsin	1					
Michigan			5	40	3	20
Ohio					3	20
Canada			13	150		
Total	138	$1,555	24	$290	51	$430

1879.

Illinois	260	$1,970	199	$505	112	$305
Kentucky	16	200				
Missouri	4	15				
Indiana	8	50			11	45
Iowa	3	75				
Wisconsin	6		11			
Michigan			16	70	19	105
Ohio	6					
Canada			58	225		
Total	303	$2,310	284	$800	142	$455

1880.

Illinois	229	$1,305	110	$345	42	$215
Iowa	13	125				
Kentucky	6	125				
Ohio	5	15				
Indiana	2				14	150
Michigan			2	25		
Canada			26	170		
Total	25	$1,570	138	$540	56	$365

1881.

Illinois	204	$1,580	68	$339	49	$313
Wisconsin	14	170				
Kentucky	24	125	7	60		
Iowa	10	85				
Canada	3	80	35	190		
Michigan			11	54	12	79
Indiana					23	80
Total	255	$2,040	121	$643	84	$472

1882.

Illinois	165	$1,400	69	$310	143	$725
Ohio	10	30	5	17		
Canada	21	410	41	216		
Indiana	9	120			26	110
Iowa	27	420			3	20
Michigan	6		30	215	13	35
Total	238	$2,380	145	$758	185	$890

1883.

State.	CATTLE.		SHEEP.		HOGS.	
	No. entries.	Amount premiums paid.	No. entries.	Amount premiums paid.	No. entries.	Amount premiums paid.
Illinois	265	$1,560	73	$378	134	$880
Indiana	59	330			31	160
Michigan	7		34	212	9	70
Kentucky	38	80				
Ohio	21	240	19	260		
Iowa	20	185				
Wyoming	13					
Canada	22	460	33	210		
Missouri	13					
Total	458	$2,855	159	$1,060	174	$1,110

1884.

Illinois	178	$875	45	$430	59	$750
Indiana	96	715			8	35
Canada	22	485				
Ohio	26	300	15	60		
Kentucky	24	195				
Iowa	36	85			16	130
Nebraska	26	85				
Missouri	5	75				
Kansas	11	20				
Minnesota	10					
Michigan			31	530	18	150
Total	434	$2,835	91	$1,020	101	$1,065

STATE EXHIBITS.

The following table gives the total number of entries of Cattle, Sheep and Hogs exhibited from the several States at the seven Fat-Stock Shows, as well as the total amount of premiums paid thereon.

State.	Cattle.		Sheep.		Hogs.		Total.	
	No. entries	Amount premiums paid.	No. entries	Amount premiums paid.	No. entries	Amount premiums paid.	No. entries	Amount premiums paid.
Illinois	1384	$10,010	570	$2,407	575	$3,528	2529	$15,945
Kentucky	134	870	7	60			141	930
Missouri	35	90					35	90
Indiana	183	1,280			122	630	305	1,910
Iowa	115	1,000	11		19	150	145	1,150
Wisconsin	21	170					21	170
Michigan	13		129	1,146	74	459	216	1,605
Ohio	68	585	39	337	3	20	110	942
Minnesota	10						10	
Nebraska	26	85					26	85
Kansas	11	20					11	20
Canada	68	1,435	206	1,161			274	2,596
Wyoming Territory	13						13	
Total	2081	$15,545	962	$5,111	793	$4,787	3836	$25,443

GOOD PRICES.

Not the least of the important results growing out of Fat-Stock Shows is the attraction to the exhibition and the Union Stock Yards at Chicago, of the leading butchers from Eastern and Western cities for the purchase of Christmas meat.

The competition among butchers for the possession of the stock exhibited at the shows enabled the owners to sell to the best advantage, as will be seen by the following figures.

Butchers, appreciating the advantage of the shows in bringing together annually a large number of the best meat animals to be found in the West, have attended the exhibition from year to year in increased numbers.

The prices obtained for cattle at the last Show, so far as reported, are as follows.

The average price obtained on each breed and their grades is given for the last five shows.

SALES—CLASS A—CATTLE.

Seller.	Breed.	Name of Animal.	Age in days	Average gain per day since birth	Weight	Price received per 100 lbs. gross	Average increase in value per day since birth	*Price obtained over market rates at stock yards, 100 gross	Amount received over market val.
C. S. Barclay, West Liberty, Ia.	Short-Horn	Chunkey	1,153	1.51	1,750	$8 00	$0 12	$1 50	$26 25
“ “	“	Cambria Boy 2d.	1,226	1.51	1,860	8 00	0 12	1 50	27 90
“ “	“	Champion 2d	1,151	1.59	1,830	7 00	0 11	1 00	18 30
“ “	“	Cox	964	1.82	1,760	7 00	0 13	1 00	17 60
“ “	“	Joe Gault	894	1.98	1,770	7 00	0 14	1 00	17 70
“ “	“	Hepoo	1,085	1.66	1,805	7 00	0 12	1 00	18 05
D. W. Smith, Bates	“	Illustrious	1,021	1 70	1,742	7 00	0 12	1 00	17 42
A. M. Winslow's Sons, Kankakee	“	Daisy Boy	383	2.43	930	5 50	0 13		
1881, Average 8 head						$7 06			
1883, “ 8 “						6 97			
1882, “ 5 “						8 70			
1881, “ 3 “						6 42			
1880, “ 6 “						6 81			
C. S. Barclay, West Liberty, Ia.	Gr. Short-Horn	Starlight	925	1.55	1,440	8 00	0 12	1 50	21 60
“ “	“ “	John	1,183	1.30	1,540	6 75	0 09	0 25	3 85
“ “	“ “	Harry	865	1.67	1,450	7 75	0 13	1 25	18 12
“ “	“ “	Matt	866	1.68	1,460	7 75	0 13	1 25	18 25
“ “	“ “	George	925	1.62	1,505	7 00	0 11	1 00	15 05
“ “	“ “	Jerry	1,259	1.43	1,805	7 00	0 10	1 00	18 05
“ “	“ “	Dick	1,235	1.58	1,955	7 00	0 11	1 00	19 55
“ “	“ “	Red Cedar	949	1.90	1,806	7 00	0 13	1 00	18 06
“ “	“ “	Thompson	987	1.74	1,715	7 00	0 12	1 00	17 15
Canada West Farm Stock Association, Brantford, Ont.	“ “	Canada's Pride	1,683	1.51	2,552	10 00	0 15	3 50	89 32
John D. Gillett, Elkhart	“ “	Storm	1,898	1.47	2,700	8 00	0 11	1 50	40 50
“ “	“ “	Conover	1,250	1.87	2,340	8 00	0 15	1 50	35 10
“ “	“ “	Foster	1,442	1.50	2,170	8 00	0 12	1 50	32 55
“ “	“ “	Paul Smith	1,382	1.49	2,065	8 00	0 12	1 50	30 97
“ “	“ “	Crump	1,284	1.49	1,905	8 00	0 12	1 50	28 57
“ “	“ “	L. Dean	1,439	1.45	2,186	8 00	0 12	1 50	32 79
John P. Gillett, Elkhart	“ “	Star	1,282	.87	1,115	9 50	0 08	3 00	33 45
“ “	“ “	Chub	1,240	1.49	1,850	9 50	0 14	3 00	55 50
“ “	“ “	Red Bell	1,290	1.42	1,835	9 50	0 13	3 00	55 05
“ “	“ “	Crump	1,243	1.49	1,855	8 75	0 13	2 25	41 74
“ “	“ “	Kinkead	1,170	1.64	1,925	8 00	0 13	1.50	28 87

J. R. Peak & Son, Winchester	Gr. Short-Horn.	Star W	975	1.84	1,795	7 75	0 14	1 25	22 44
" " "	" "	Tornado.	943	1.81	1,710	7 75	0 14	1 25	21 37
" " "	" "	Winfield	917	1.76	1,620	7 75	0 14	1 25	20 25
" " "	" "	Harry Clay	972	1.61	1,565	7 75	0 12	1 25	19 56
" " "	" "	Gold King	880	1.81	1,600	8 00	0 14	1 50	24 00
" " "	" "	Boss	929	1.77	1,660	7 75	0 14	1 25	20 85
1884, Average 27 head						$7 97			
1883, " 52 "						7 73			
1882, " 22 "						8 32			
1881, " 37 "						7 48			
1880, " 4 "						6 05			
C. M. Culbertson, Chicago	Hereford.	Choctaw	1,077	1.65	1,785	8 00	0 13	1 50	26 77
Fowler & Van Natta, Fowler, Ind	"	Artless	1,374	1.13	1,560	8 50	0 10	2 00	31 20
" "	"	Robert	1,056	1.33	1,405	7 50	0 10	1 00	14 05
Indiana Blooded Stock Co., Indianapolis, Ind	"	Prince	996	1.86	1,860	9 00	0 17	2 50	46 50
" " " "	"	Maine Boy	951	1.73	1,555	9 00	0 15	2 50	38 87
1884, Average 5 head						$8 40			
1883, " 3 "						6 72			
1882, " 1 "						8 50			
1881, " 5 "						9 00			
1880, " 2 "						12 50			
G. S. Burleigh, Mechanicsville, Ia.	Grade Hereford.	Hattie	1,164	1.18	1,375	7 00	0 08	0 50	6 87
C. M. Culbertson, Chicago	" "	Texas Jane	546	1.84	1,015	8 00	0 15	1 50	15 22
" "	" "	Savage	1,000	1.56	1,560	8 00	0 12	1 50	23 40
" "	" "	Fisher	941	1.66	1,560	8 00	0 13	1 50	23 40
" "	" "	Landrigan,	941	1.75	1,650	8 00	0 14	1 50	24 75
" "	" "	Funk	926	1.76	1,630	8 00	0 14	1 50	24 45
Fowler & Van Natta, Fowler, Ind	" "	Benton's Ch'mp'n	1,301	1.76	2,300	13 00	0 23	6 50	149 50
" " "	" "	Price	1,307	1.64	2,150	7 50	0 13	1 00	21 50
" " "	" "	Rogers	1,118	1.56	1,750	9 00	0 14	2 50	43 75
" " "	" "	Noble Boy	1,049	1.71	1,795	7 50	0 13	1 00	17 95
" " "	" "	Victor	985	1 74	1,695	7 50	0 13	1 00	16 95
" " "	" "	James	920	1.86	1,715	7 50	0 14	1 00	17 50
" " "	" "	Joseph	688	2.22	1,530	7 50	0 17	1 00	15 30
Indiana Blooded Stock Co., Indianapolis, Ind	" "	Nip	952	1.84	1,760	9 00	0 18	2 50	44 00
T. C. Ponting, Moweaqua.	" "	John A. Logan	867	2.09	1,815	10 00	0 21	3 50	63 52
Lucien Scott, Leavenworth, Kan	" "	Jim Lee	1,267	1.50	1,905	7 00	0 10	0 50	9 52
1884, Average 16 head						$8 28			
1883, " 21 "						7 87			

Sales—Continued.

Seller.	Breed.	Name of Animal.	Age in days	Average gain per day since birth	Weight	Price received per 100 lbs. gross	Average increase in value per day since birth	*Price obtained over market rates at stock yards, 100 gross.	Amount received over market val.
1882, Average 5 head						$7 40			
1881, " 11 "						9 41			
1880, " 2 "						12 50			
T. B. Wales & Son, Iowa City, Ia.	Holstein	Minerva	3,174	.60	1,920	5 50	0 03		
Total									$1600 40

*The price for choice export Cattle for week of the Show did not average over $6.50 per 100 pounds gross.

SALES—CLASS C—SHEEP.

Stone & Loake, Stonington	Cotswold	Camargo	546	.30	167	$6 00	$0 02	$1 75	$2 92
Frank Willson, Jackson, Mich	"	Mack	975	.29	280	10 00	0 03	5 75	16 00
1884, Average 2 head						$8 00			
1883, " 1 "						8 00			
1882, " 7 "						7 00			
Mrs. Ann Newton, Pontiac, Mich	Southdown	Tom	953	.19	178	8 00	0 01	3 75	6 67
" "	"	Dick	590	.30	180	9.00	0 03	4 75	8 55
" "	"	Percy	922	.14	129	8 00	0 01	3 75	4 84
1884, Average 3 head						$8 33			
1883, " 4 "						8 00			
Frank Willson, Jackson, Mich	Cotsw'ld-So'dw'n	Murphy	974	.28	275	10 00	0 03	5 75	15 81
" "	" "	Ned	973	.26	249	10 00	0 02	5 75	14 32
" "	" "	Ted	972	.24	234	10 00	0 02	5 75	13 45
1884, Average 3 head						$10 00			
Mrs. Ann Newton, Pontiac, Mich	Hampshire	Jumbo	977	.24	232	8 00	0 02	3 75	8 70
Stone & Loake, Stonington	Gr. Hampshire	Hudson	169	.61	104	4 00	0 02		
Mrs. Ann Newton, Pontiac, Mich	H'pshire-C'tsw'ld	Will	580	.37	215	9 00	0 03	4 75	10 21
Stone & Loake, Stonington	Oxford	Garfield	536	.34	186	10 75	0 04	6 50	12 09
" " "	Grade Oxford	Sanders	189	.52	99	4 00	0 02		
" " "	" "	Smut	541	.30	161	11 18	0 03	6 43	10 35
" " "	" "	Perfection	533	.31	165	6 00	0 02	1 75	2 89
" " "	" "	Hero	546	.31	169	6 00	0 02	1 75	2 96
1884, Average 4 head						$6 79			
Stone & Loake, Stonington	Gr. Shropshire	Economy	907	.16	145	6 00	0 01	1 75	2 54
Mrs. Ann Newton, Pontiac, Mich	S'pshire-So'd'wn	Lue	941	.19	179	8 00	0 01	3 75	6 71
Total									$139 11

* The price of strictly choice grades of sheep for the week of the Show did not average over $4.25 per 100 pounds gross.

SALES—CLASS D—SWINE.

Seller.	Breed.	Name of Animal.	Age in days	Average gain per day since birth	Weight	Price received per 100 lbs. gross	Average increase in value per day since birth	*Price obtained over market rates at stock y'ds, 100 gross	Amount received over market value.
Geo. F. Davis & Co., Dyer, Ind	Victoria	Prince	472	.90	423	$4 75	$0 06	$0 25	$1 06
" " " "	"	Beauty	260	1.25	200	4 75	0 06	0 25	50
1884, Average 2 head						$4 75			
1883, " 9 "						5 25			
Geo. F. Davis & Co., Dyer, Ind.	Grade Victoria	Dick	455	.93	425	4 75	0 04	0 25	1 06
" " " "	" "	Tom	455	.81	370	4 75	0 04	0 25	92
Stone & Loake, Stonington	" "	Jack	408	1.01	423	4 50	0 04		
1884, Average 3 head						$4 67			
1883, " 2 "						5 25			
Frank Willson, Jackson, Mich	Essex	George	531	.96	509	5 00	0 05	0 50	2 54
" " "	"	Frank	318	1.12	355	5 00	0 05	0 50	1 77
" " "	"	Watson	197	1.10	217	5 00	0 05	0 50	1 08
1884, Average 3 head						$5 00			
1883, " 2 "						5 25			
Frank Willson, Jackson, Mich	Suffolk	Jim	160	.98	156	5 00	0 05	0 50	78
" " "	"	Tom	160	1.28	205	5 00	0 06	0 50	1 02
" " "	"	Peter	405	.68	275	5 00	0 03	0 50	1 37
" " "	"	Carl	405	.79	319	5 00	0 04	0 50	1 59
" " "	"	Jerry	405	.83	336	5 00	0 04	0 50	1 68
1884, Average 5 head						$5 00			
Adam Donaldson, Pleasant Valley, Ia	Duroc Jersey Red	Red Boy 2d	341	1.24	424	4 50	0 05		
" " " "	" "	Red Boy 3d	341	1.24	423	4 50	0 05		
" " " "	" "	Red Boy 4th	341	1.17	399	4 50	0 05		
" " " "	" "	Red Boy 5th	341	1.19	370	4 50	0 05		
" " " "	" "	Major Winfield	430	1.32	567	4 50	0 06		

G. W. Stoner, LaPlace	Duroc Jersey Red	Goldson	536	.92	493	4 35	0 04		
" " "	" "	Fenton	544	.80	435	4 35	0 03		
" " "	" "	Prince	552	.80	443	4 35	0 03		
" " "	" "	Hudson	485	.77	372	4 35	0 03		
" " "	" "	Orange Boy	485	.83	400	4 35	0 03		
" " "	" "	Clifton	542	.78	425	4 35	0 03		
" " "	" "	Langley	485	.84	410	4 35	0 04		
1884, Average 12 head						$4 41			
1883, " 5 "						5 55			
1882, " 6 "						6 83			
Total									$15 37

*The price for choice packing Hogs for the week of the Show did not average over $4.50 per 100 pounds gross.

COMPARISON OF SALES.

The following table is given in order that a comparison may be made, so far as reported, of the prices obtained for stock exhibited and sold at the last five Fat-Stock Shows.

Year.	BREED CATTLE.	No. head.	Price per 100 pounds gross.
1880	Short-Horn	6	$6 81
1881	"	3	6 42
1882	"	5	8 70
1883	"	8	6 97
1884	"	8	7 06
Average		6	$7 19
1880	Grade Short-Horn	2	6 05
1881	" "	27	7 48
1882	" "	22	8 32
1883	" "	52	7 73
1884	" "	27	7 97
Average		28	$7 51
1880	Hereford	1	12 50
1881	"	5	9 00
1882	"	1	8 50
1883	"	3	6 72
1884	"	8	8 40
Average		3	$9 02
1880	Grade Hereford	2	12 50
1881	" "	11	9 41
1882	" "	5	7 40
1883	" "	21	7 87
1884	" "	16	8 28
Average		11	$9 09
1880	Devon	2	6 50
1881	"	6	6 50
Average		4	$6 50
1884	Holstein	1	5 50
	BREED SHEEP.		
1882	Cotswold	7	$7 00
1883	"	1	8 00
1884	"	2	8 00
Average		3	$7 67
1883	Grade Cotswold	4	6 50
Average		4	$6 50
1883	Grade Leicester	1	8 00
Average		1	$8 00
1883	Southdowns	4	8 00
1884	"	3	8 33
Average		3	$8 16
1883	Shropshire	10	8 00
Average		10	$8 00
1883	Merino	5	6 79
Average		5	$6 79

Comparison of Sales—Continued.

Year.	BREED SHEEP.	No. head.	Price per 100 pounds gross.
1882	Grade Merino	5	$8 50
Average		5	$8 50
1884	Cotswold-Southdown	3	10 00
Average		3	$10 00
1884	Hampshire	1	8 00
Average		1	$8 00
1884	Grade Hampshire	1	4 00
Average		1	$4 00
1884	Hampshire-Cotswold	9	9 00
Average		1	$9 00
1884	Oxford	1	10 75
Average		1	$19 75
1884	Grade Oxford	4	6 79
Average		4	$6 79
1884	Grade Shropshire	1	6 00
Average		1	$6 00
1884	Shropshire-Southdown	1	8 00
Average		1	$8 00
	BREED SWINE.		
1883	Berkshire	5	$5 25
Average		5	$5 25
1882	Poland China	1	7 00
1883	" "	4	5 25
Average		2	$6 12
1882	Chester White	4	7 50
1883	" "	4	5 25
Average		4	$6 37
1883	Victoria	9	5 25
1884	"	2	4 75
Average		5	$5 00
1883	Grade Victoria	2	5 25
1884	" "	3	4 67
Average		2	$4 96
1883	Essex	2	5 22
1884	"	3	5 00
Average		2	$5 12

Comparison of Sales—Continued.

Year.	BREED SWINE.	No. head.	Price per 100 pounds gross.
1882	Duroc Jersey Red	6	$6 83
1883	" " "	5	5 55
1884	" " "	12	4 41
Average		8	$5 60
1883	Grade Duroc	5	5 55
Average		5	$5 55
1884	Suffolk	5	5 00
Average		5	$5 00

SUMMARY OF SALES.

The summary of the sales made of cattle, sheep and hogs exhibited at the Fat-Stock Shows, is given in the following tables so far as reported.

The limited number included in the table is partially accounted for by the fact that a large portion of the younger animals were held and fed for future shows.

CATTLE.

Breed.	Number of head.	Average price per 100 lbs., live weight.
Short-Horns	30	$7 19
Grade Short-Horns	140	7 51
Herefords	15	9 02
Grade Herefords	65	9 09
Devon	8	6 50
Grade Devon	2	6 00
Ayrshire	1	6 00
Holstein	1	5 50

In the average price obtained per pound, live weight, the breeds of cattle take precedence as follows: Grade Herefords, Herefords, Grade Short-Horns, Short-Horns, Devons, Grade Devons, Ayrshires and Holsteins.

SHEEP.

Breed.	Number of head.	Average price per 100 lbs., live weight.
Cotswold	10	$7 67
Grade Cotswold	4	6 50
Grade Leicester	1	8 00
Southdown	7	8 10
Shropshiredown	10	8 00
Merino	5	6 79
Grade Merino	5	8 50
Cotswold-Southdown	3	10 00
Hampshire	1	8 00
Grade Hampshire	1	4 00
Hampshire-Cotswold	1	9 00
Oxford	1	10 75
Grade Oxford	4	6 79
Grade Shropshire	1	6 00
Shropshire-Southdown	1	8 00

Comparison of Sales—Continued.

HOGS.

Breed.	Number of head.	Average price per 100 lbs., live weight.
Berkshire	5	$5 25
Poland China	5	6 12
Chester White	8	6 37
Victoria	11	5 00
Grade Victoria	5	4 98
Essex	5	5 12
Duroc Jersey Red	23	5 60
Grade Duroc Jersey Red	5	5 55
Suffolk	5	5 00

FINANCES.

The receipts in connection with the Fat-Stock Show, as well as the donations of money for the general expense fund and for special premiums, are given in the following table:

Year.	RECEIPTS.			
	Gate Permits, etc.	Donations	Special Premiums	Total.
1878.	$3,024 06	$1,600 00	....	$4,624 06
1879.	4,701 08	2,770 00	....	7,471 08
1880.	2,633 39	3,295 00	$473 90	6,392 29
1881.	2,967 75	4,085 00	808 00	7,860 75
1882.	6,271 90	3,435 00	953 00	10,659 90
1883.	8,808 90	3,720 00	3,914 00	16,442 90
1884.	8,789 95	3,670 00	3,763 00	16,252 95
	$37,187 03	$22,575 00	$9,911 90	$69,673 93

The disbursements, etc., in connection with the seven Fat-Stock Shows, including the regular and special premiums awarded, as well as the deficit or credit for each exhibition, are given in the following table:

Year.	PREMIUMS.			Expenses oth'r than Premiums	Total Expense.	Balance.	Deficit.
	Regular.	Special.	Total.				
1878.	$2,395 00	....	$3,395 00	$2,680 87	$5,075 87	....	$451 81
1879.	4,221 73	....	4,221 73	5,110 59	9,832 32	....	1,861 24
1880.	2,450 76	$473 90	2,924 66	4,045 81	6,970 47	....	578 18
1881.	3,223 00	808 00	4,131 00	3,747 78	7,878 78	....	18 03
1882.	4,354 00	953 00	5,307 00	4,678 34	9,985 34	$674 56	....
1883.	5,155 00	3,914 00	9,069 00	7,029 52	16,098 52	344 38	....
1884.	4,920 00	3,763 00	8,683 00	7,713 34	16,397 34	....	144 39
	$26,819 49	$9,911 90	$36,731 39	$35,007 25	$71,738 64	$1,018 94	$3,053 65

PREMIUMS PAID.

The following table gives the total number of entries of catle, sheep and hogs exhibited at the seven Fat-Stock Shows, as well as the total premiums (except specials) paid thereon for the years named:

Year.	CATTLE.		SHEEP.		HOGS		TOTAL.	
	Number of entries.	Amount prem's paid.	Number of entries.	Amount prem's paid.	Number of entries.	Amount prem's paid.	Number of entries.	Amount prem's paid.
1878	138	$1,555	24	$290	51	$430	213	$2,275
1879	303	2,310	284	800	142	455	729	3,565
1880	255	1,570	138	540	56	365	449	2,475
1881	255	2,040	121	643	84	472	460	3,155
1882	238	2,380	145	758	185	890	568	4,028
1883	458	4,855	159	1,060	174	1,110	791	5,025
1884	434	2,835	91	1,020	101	1,065	626	4,920
Total	2,081	$15,545	962	$5,111	793	$4,787	3,836	$25,443

ILLINOIS

AGRICULTURAL STATISTICS

FOR 1884.

The aggregate farm value of the crop and animal products of the State of Illinois for the year ending December 31, 1884, is $235,114,267, or $16,410,492 less than the reported value of the products for the previous year.

The yield of the leading crops the past season largely exceeds the average for a term of years, and the decreased value in 1884, as compared with the previous year, is owing mainly to over-production and the depressed condition of the market.

The price per bushel of corn has not been as low as during the past season but five times during the past twenty-five years, viz: 1861, 1862, 1865. 1877 and 1878.

The value per bushel of wheat has not been as low in this State since 1860 as during the past season.

The price of oats has not been lower than the past season, during the preceding twenty-five years, except in 1861, 1872, 1878 and 1879.

The market since the late harvest has not been as unfavorable for the sale of hay during the past twenty-five years except in 1877 and 1878.

There was an increase in the reported productions of the State, in 1884. as compared with 1883, as follows; Corn, 20,973,124 bushels; winter wheat, 13,826,261 bushels; spring wheat, 193,640 bushels; oats, 1,015,728 bushels; barley, 392.269 bushels; buckwheat, 8,236 bushels; castor beans, 15,831 bushels; beans, 5,597 bushels; sweet potatoes, 45,399 bushels; tobacco, 1,520,982 pounds; sorgo syrup, 116,961 gallons; fat cattle, (number) 4,132; fat hogs, (number) 343.457; butter, 497,963 pounds; milk, 7,050,045 gallons.

There was a decrease in the reported productions of the State, in 1884, as compared with the previous year, as follows: Apples, 2,665.595 bushels; peaches, 125,594 bushels; pears, 2,710 bushels; hay, 116,839 tons; rye, 519,352 bushels; Irish potatoes, 2,576,921 bushels; broom corn, 16,794,000 pounds; wool, 146,784 pounds; cheese, 136,129 pounds.

There was a decrease in the aggregate value of the crops produced in the State the past season, as compared with 1883, as follows: Corn, $7,767.545; oats, $659,961; rye, $68,682; buckwheat, $3.986; Irish potatoes, $1,011,247; broom corn, $896,145; hay, $3,905 172; Hungarian and millet, $20,104; apple orchards, $2,446,192; peach orchards, $53 322; pear orchards, $6,609; vineyards, (wine) $40,613; vineyards, (grapes). $13,844; other fruits and berries, $16,566; turnips and other root crops, $125,865; butter, $857,230; cheese, $193,852; cream, $629,607; fat sheep, $195,093; wool, $187,404; fat hogs, $7,885,147.

VALUE CROP AND ANIMAL PRODUCTS IN ILLINOIS.

The following table gives the aggregate value of the crop and animal products of the State during the past eight years.

VALUE CROP AND ANIMAL PRODUCTS IN ILLINOIS.

Farm Crops, etc.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Corn	$77,562,879	$56,035,842	$97,483,052	$83,757,039	$93,328,977	$76,528,755	$68,067,698	$66,300,153
Winter wheat	34,960,824	23,870,257	37,266,757	44,457,428	23,377,484	45,472,045	18,785,499	25,366,010
Spring wheat	3,041,238	3,189,203	2,663.882	2,039,732	756,296	1,242,331	551,564	641,195
Oats	16,269,747	10,684,911	12,059,162	12,858,247	21,022.267	41,062,611	27,403,706	26,743,745
Rye	2,103,800	1,195,535	1,991,404	1,513,587	2,403,954	4,064,483	2,244,646	2,175,964
Barley	396,182	398,844	265,951	560,703	892,328	641,951	398,901	562,328
Buckwheat	151,612	206,608	85,257	47,838	18,339	30,877	41,800	37,864
Castor beans	19,512	3,157	24,344	3,654	6,608	33,548	4,668	30,794
Beans	29,916	25,146	54,325	25,430	10,781	42,969	31,874	35,017
Peas	19,923	32,115	64,032	30,651	16,069	28,779	27,262	....
Irish potatoes	3,057,907	2,394,874	3,506,788	3,689,348	4,393,676	6,261.307	5,105,203	4,093,956
Sweet potatoes	126,029	99,402	113.552	202,070	123,645	209,538	171,847	184,077
Tobacco	630,847	158,794	246,719	218,912	139,798	195,759	140,921	321,582
Broom corn	237,584	277,645	484,195	559,447	1,651,739	1,068,058	1,481,717	585,572
Hemp (fiber)	865	346	150	272	165	14	11	....
Cotton (lint)	4,310	275	1,428	3,804	4,246	5,236	....	....
Flax (fiber)	9,257	8.262	12,738	5,124	4,026	2,571	2,592	....
Sorgo (syrup)	515,409	528,547	497,572	267,211	251,193	632,565	604,157	631,270
Hay	21,971.368	19,994,341	16,428,012	22,589,691	24,184,087	34,006,164	30,990,271	27,985,099
Apple orchard	4,316,281	3,211,527	4,469,017	5,791,624	3,244,625	2,090,813	5,124,042	2,687,850
Peach orchard	370,380	376.521	34,503	319,176	149,586	105,046	280,765	227,443
Pear orchard	22,704	16,887	9,508	46,428	25,443	21,804	12,737	6,128
Vineyard (wine)	191,933	171,557	424,220	610,638	175,282	90,988	89,518	48,605
Vineyard (grape)	....	....	....	....	....	47,579	36,344	22,500
Other fruits and berries	178,800	197,581	185,488	231,417	202,086	187,327	267,313	250,747
Turnips and other root crops	279,136	155,149	722,444	105,414	448,380	440,686	897,303	771,438
Other crops not named	299,543	157,862	526,189	168,244	623,572	190,852	263.496	....
Pastures	14,801,112	12,324,647	12,319,620	14,491,114	14,397,176	17,568,690	17,073,741	19.241,249
Fat cattle	19,046,421	12,608,304	15,696,219	18,014,743	21,950,890	23,135,715	21,358,636	22,521,246
Butter	3,794,045	2,699,648	4,755,363	4,910,690	5,610,647	6,207,449	5,606,737	4,749,567
Cheese	540,320	513,991	860,367	804,398	875,696	652,084	672,474	478,622
Cream	1,509,342	32,608	112,943	300,657	704,279	791,722	1,229,826	600,219
Milk	1,912,236	3,209,579	7,732,788	3,573,796	3,814,581	6,299,626	5,953,207	6,783.071
Fat sheep	1,019,766	476,201	538,528	605,448	938,861	954,863	874,853	679,758
Wool	987,503	722,752	1,380,595	1,617,698	1,344,646	1,695,660	1,099,822	912,418
Fat hogs	26,299,187	15,426,743	23,169,392	26,259,416	25,946,974	43,832,117	32,772,001	24,886,854
Honey	....	....	....	....	123,789	558,260	652,796	....
Timothy seed	604,364	326,949	479,990	880,272	1,108,980	675,233	476,447	512,438
Clover seed	310,493	313,421	680,955	400,862	650,218	452,545	375,065	609,945
Hungarian and millet seed	10,701	14,733	32,832	46,752	72,379	50,607	43,291	17,187
Cotton seed	2,400	5,450	255	128	3,718	1,338	....	....
Flax seed	908,491	1,019,566	1,945,252	1,579,634	1,099,017	911,656	300,008	314,416
Totals	$238,514,407	$173,084,780	$249,335,788	$253,588,737	$256,096,512	$317,982,380	$251,524,759	$235,114,267

RELATIVE VALUE OF CROP AND ANIMAL PRODUCTS.

The following table gives by percentage the proportionate amount obtained during the past eight years for the crop and live stock products of the State.

Farm Crops, etc.	Per cent. of value to total value crops, etc., in State in 1877	Per cent. of value to total value crops, etc., in State in 1878	Per cent. of value to total value crops, etc., in State in 1879	Per. cent. of value to total value crops, etc., in State in 1880	Per cent. of value to total value crops, etc., in State in 1881	Per cent. of value to total value crops, etc., in State in 1882	Per cent. of value to total value crops, etc., in State in 1883	Per cent. of value to total value of crops in State in 1884
Corn	32.5191	32.3744	39.0970	33.0286	36.4428	24.0669	27.0620	25.6471
Winter wheat	14.6577	13.7910	14.9464	17.5313	9.1283	14.3002	7.4647	10.7888
Spring wheat	1.2750	1.8425	1.0683	0.8043	0.2953	0.3907	0.2193	0.2727
Oats	6.8212	6.1732	4.8365	5.0705	8.2087	12.9135	10.8950	11.3741
Rye	0.8820	0.6907	0.7986	0.5968	0.9386	1.2782	0.8924	0.9255
Barley	0.1661	0.2304	0.1066	0.2211	0.3484	0.2019	0.1586	0.2392
Buckwheat	0.0635	0.1193	0.0341	0.0188	0.0071	0.0097	0.0166	0.0161
Castor beans	0.0081	0.0018	0.0097	0.0014	0.0025	0.0106	0.0018	0.0131
Beans	0.0125	0.0145	0 0217	0.0100	0.0042	0.0135	0.0127	0.0140
Peas	0.0083	0.0185	0.0256	0.0120	0.0062	0.0091	0.0108	....
Irish potatoes	1.2820	1 3836	1.4064	1.4548	1.7156	1.9691	2.0297	1.7412
Sweet potatoes	0.0528	0.0584	0.0455	0.0796	0.0482	0.0659	0.0683	0.0783
Tobacco	0.2064	0.0917	0.0989	0.0863	0.0545	0.0617	0.0560	0.1368
Broom corn	0.0996	0.1604	0.1941	0.2206	0.6449	0.3359	0.5891	0.2490
Hemp (fiber)	0.0003	0.0001	0.0001	0.0001	0.0001	0 0000	0.0000	....
Cotton (lint)	0.0018	0.0001	0.0695	0.0015	0.0016	0.0016	0.0000	....
Flax (fiber)	0.0038	0.0047	0.0051	0.0020	0.0015	0.0018	0.0010	....
Sorgo (syrup)	0.2160	0.3053	0.1995	0.1053	0.0980	0.1990	0.2402	0.2680
Hay	9.2117	11.5517	5.5887	8.9080	9.4433	10.6944	12.3210	11.5199
Apple orchard	1.8096	1.8554	1.7923	2.2838	1.2669	0.6575	2.0412	1.1432
Peach orchard	0.1552	0.2172	0.0138	0.1258	0.0584	0.0330	0.1116	0.0967
Pear orchard	0.0095	0.0097	0.0038	0.0183	0.0099	0.0069	0.0050	0.0026
Vineyard (wine)	0.0804	0.0991	0.1520	0.2407	0.0684	0.0286	0.0356	0.0207
Vineyard (grapes)	....	....	....	....	....	0.0118	0.0144	0.0096
Other fruits and berries	0.0749	0.1141	0.0743	0.0912	0.0789	0.0589	0.1063	0.1066
Turnips and other root crops	0.1170	0.0896	0.2897	9.0415	0.1750	0.1386	0.3567	0.3281
Other crops not named	0.1255	0.0912	0.2110	0.0663	0.2434	0.0600	0.1048	....
Pastures	6.2055	7.1205	4.9409	5.7144	5.6217	5.5255	6.7881	8.1838
Live Stock, etc.								
Fat cattle	7.9854	7.2844	6.2952	7.1034	8.5713	7.2752	8.4917	9 5788
Butter	1.5906	1.5597	1.9072	1.9364	2.1908	1.9521	2.2291	2.0201
Cheese	0.2265	0.2969	0.3450	0.3172	0.3419	0.2051	0.2674	0.2036
Cream	0.6328	0.0188	0.0452	0.1185	0.2750	0.2490	0.4889	0.2552
Milk	0.8017	1.8543	3.1013	1.4092	1.4895	1.9811	2.3660	2.8850
Fat sheep	0.4275	0.2751	0.2159	0.2387	0.3666	0.3003	0.3478	0.2891
Wool	0.4140	0.4175	0.5533	0.6379	0.5250	0.3760	0.5373	0.3881
Fat hogs	11.0262	8.9128	9.2924	10.3551	10.1317	13.7845	13.0293	10.5850
Honey	......	......	....	....	0.0483	0.1756	0.2595	....
Seeds, etc.								
Timothy seed	0.2534	0.1888	0.1925	0.3471	0.4330	0.2123	0.1894	0.2171
Clover seed	0.1301	0.1810	0.2771	0.1580	0.2538	0.1423	0.1491	0.2594
Hungarian and millet seed	0.0044	0.0085	0.0131	0.0184	0.0282	0.0159	0.0172	0.0073
Cotton seed	0.0010	0.0031	0.0001	....	0.0014	0.0004	....	....
Flax seed	0.3808	0.5890	6.7801	0.6229	0.4291	0.2867	0.1193	0.1337
Totals	100.	100.	100.	100.	100.	100.	100.	100.

It will be seen in the foregoing table that over one-fourth of the proceeds of the farms of this State are derived from the animal products. The leading crops are entitled to precedence as follows: The late corn crop equals in value twenty-five per cent. of the total productions of the State; hay, 11+ per cent.; oats, 11+ per cent.; winter wheat, 10+ per cent.; pastures, 8+ per cent. In 1879 the value of the corn crop was over thirty-nine per cent. of the total annual value of the crop and animal products of the State, and the wheat crop of that season amounted to over fifteen per cent. of the total productions of the farm.

There has been an increase of late years in the proportionate value of the animal products when compared with the cereal and other crops grown in the State.

ANNUAL VALUE OF FARM CROPS.

The value of farm crops produced in 1884 exceeded four millions of dollars in the counties of LaSalle and McLean. In the following counties the farm crops the past year were valued at between three and four million of dollars: Livington, Will, Ogle, Lee, Champaign, Henry, DeKalb and Knox. The annual value of farm crops produced in 1884 in each of the following counties is reported to be between two and three million of dollars; Madison, Bureau, McHenry, Vermilion, Sangamon, St. Clair, Adams, Morgan, Fulton Pike, Cook, Stephenson, Macon, Warren, JoDaviess, Macoupin, Christian, Montgomery, Hancock, Logan, Winnebago, Kane, McDonough, Carroll, Tazewell, Whiteside and Mercer.

The productive value of the lands in the several counties in the State is partially indicated in the average value per acre received for the crops of 1884.

The value per acre of the farm crops produced in the counties in the State, in 1884, give the counties precedence as follows; In DuPage county the crops produced the past season averaged $8.33 per acre; DeKalb, $7.92; Boone, $7.67; McHenry, $7.60; Stark, $7.50; Morgan, $7.45; Warren, $7.36; Ogle, $7.32; Stephenson, $7.30; Lee, $7.23; Knox, Macon and Will, $7.08; Monroe, $7.00; Carroll, $6.83; St. Clair, $6.71; Madison, $6.66; Winnebago, $6.63; Kane, $6.53; Menard, $6.47; JoDaviess, $6.45; Putnam, $6.43; Henry, $6.39; Kendall, $6.37; Grundy, $6.27; Marshall, $6.02; LaSalle, $5.97: Gallatin, $5.87;; Mercer, $5.82; Jersey, $5.79; Livingston, $5.76; McDonough, $5.71; Woodford, $5.65; Logan, $5.63; McLean, $5.61; Clinton, $5.60; Henderson, $5.43; Greene, $5.40; Bureau, $5.39; Champaign, $5.32; Randolph, $5 29; Adams, $5.26; Schuyler, $5.25; Pike, $5.24; Vermilion, $5.15; Sangamon, $5.14; Rock Island, $5.13; Brown and Cook, $5.10; DeWitt, $5.09; Montgomery, $5.08; Lake, $5.07; Christian, $5.03; Peoria, $4.96; Fultan, $4.95; Iroquois and Tazewell, $4.93; Edgar, $4.85; Whiteside, $4.68; Kankakee, $4.56; Ford, $4.51; Macoupin, $4.47; Hancock, $4.28; Shelby, $4.12; Union, $4.09; Edwards, $4.08; Cumberland, $4.07; Douglas, $4.05; Hamilton, $4.03; Wabash, $3.91; Coles, $3.83; Washington, $3.71; Cass, $3.61; Moultrie, $3.57; Bond, $3.56; White, $3.41; Pulaski, $3.40; Effingham, $3.36; Calhoun, $3.33; Lawrence, $3.29; Richland, $3.25; Piatt, $3.06; Jackson $3.00; Massac, $2.86; Jefferson, $2.80; Clark, $2.74; Crawford, $2.71; Johnson, $2.70; Pope, $2.58; Clay, $2.56; Marion, $2.38; Williamson, $2.29; Scott, $2.23; Fayette, $2.20; Saline, $2.15; Alexander and Jasper, $2.12; Wayne, $1.90; Perry, $1.85; Mason, $1.37; Hardin, $1.14; Franklin, $0.32.

PRICES FARM PRODUCTS.

The following table gives the farm prices of products on the first of December, during the past nine years. Corn has not been as low during the past six years, and wheat is selling for less than at any corresponding date during the past nine years. Only in 1877 and 1878 has the price ruled as low for oats. Rye is selling for less than in any December since 1876, excepting in 1878. Price of Irish potatoes has not been as low during the past nine years. Hay has not been as low during the past twenty-five years, except in 1877 and 1878.

ARTICLES.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Corn, per bushel	$0 30	$0 30	$0 22	$0 32	$0 33	$0 53	$0 42	$0 37	$0 31
Winter wheat, per bushel	1 01	1 19	79	1 21	93	1 24	87	93	64
Spring wheat, per bushel	92	95	68	1 06	83	1 07	81	84	57
Oats, per bushel	30	23	17	29	29	43	32	26	24
Rye, per bushel	56	52	41	66	72	93	56	54	47
Barley, per bushel	53	47	56	68	70	87	61	54	50
Buckwheat, per bushel	......	73	1 33	77	77	1 12	77	90	68
Irish potatoes, per bushel	58	45	47	50	56	1 08	55	36	35
Sweet potatoes, per bushel	......	85	85	90	90	1 08	1 03	90	80
Winter apples, per bushel	44	80	65	75	56	1 22	85	80	68
Hay, per ton	6 25	6 35	4 33	10 00	9 30	12 45	9 31	5 90	5 45
Castor beans, per bushel	......	1 10	1 25	1 00	1 05	1 65	1 54	1 35	1 65
Tobacco, per pound	......	08	07	09	08	08	08	08	11
Broom corn, per ton	......	71 20	49 50	86 75	77 40	128 54	79 00	87 00	76 00
Beef catttle, gross, per cwt	3 47	3 37	2 95	3 50	3 75	4 20	4 10	4 25	4 50
Fat hogs, gross, per cwt	4 09	4 23	2 80	3 30	4 13	5 65	5 70	4 75	4 50
Fat sheep, gross, per cwt	4 50	4 40	3 80	2 98	3 40	3 45	3 50	3 40	3 50

It will be seen in the above table that the price of beef cattle is higher than in any previous December during the past nine years.

Fat hogs have been selling higher this year than in any December since 1876, except in 1881, 1882 and 1883.

The December price of fat sheep is less than for corresponding month in any year included in the foregoing table, excepting 1879

PROFITS PER ACRE.

The net profit per acre on the leading crops grown in the State the past season have been as follows: Hay, $4.65; barley, $5.20; Irish potatoes, $11.53. The prevailing low prices and medium yield per acre of some of the crops have resulted in losses the past season as follows: Corn, $1.70 per acre; wheat, $1.44; oats, .77, and rye, $1.97.

The following table shows the average net profit or loss, realized per acre on the principal crops grown in the State since 1860, after deducting the various items of expense, the use and preparation of land, seed, cultivation and marketing the crop.

Year.	Corn.	Wheat	Hay.	Oats.	Rye.	Barley	Irish Pot'toes
1860	$2 24	-$0 95	$6 60	-$2 12	-$1 93	$0 71	$4 25
1861	-3 50	-2 53	6 60	-4 08	-4 36	-4 58	2 64
1862	-1 01	09	6 25	-4 60	-1 20	11 05	19 45
1863	3 14	2 04	9 90	4 04	2 04	10 26	31 25
1864	14 25	11 66	15 65	9 60	5 42	20 49	72 88
1865	-0 19	1 45	6 60	-1 06	-1 74	1 36	34 72
1866	3 08	14 54	6 27	1 81	2 52	6 45	34 81
1867	5 70	11 90	7 24	5 34	8 05	17 97	52 05
1868	4 20	3 25	6 65	3 04	5 26	24 53	36 96
1869	2 72	-2 04	8 34	2 62	-0 48	8 26	21 68
1870	1 82	73	5 32	-1 08	-0 46	1 85	31 29
1871	1 75	3 96	5 81	-0 14	-0 16	2 71	31 39
1872	-0 97	4 23	5 43	-2 45	-0 75	3 80	13 95
1873	-3 78	4 29	3 58	-1 09	-0 80	11 35	24 25
1874	-0 42	-0 67	5 23	-1 53	1 13	6 13	25 10
1875	1 16	-1 00	5 98	-0 16	0 26	7 37	20 41
1876	-2 75	-1 91	2 00	-4 20	-0 52	-1 70	25 20
1877	-1 82	8 68	2 64	1 05	-5 70	-1 75	12 40
1878	-4 04	1 09	1 09	-3 33	-5 03	-0 36	9 06
1879	1 66	5 81	25	-2 01	-1 33	-0 12	18 45
1880	1 06	3 72	2 40	-1 00	0 30	3 71	18 09
1881	2 20	-2 63	3 07	1 10	3 16	5 73	29 61
1882	-0 47	5 71	6 21	6 55	1 11	7 81	37 00
1883	-1 50	-1 60	3 41	0 03	-1 94	4 45	22 65
1884	-1 70	-1 48	1 65	-0 77	-1 97	-5 20	11 53
Average	$0 91	$2 74	$5 37	$0 22	$0 23	$6 10	$25 6

In the foregoing table the minus sign (-) is used where the crop was grown at a loss

CROP AND LIVE STOCK PRODUCTS OF ILLINOIS.

Farm Crops, etc.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Corn, bu	193,080,845	274,101,628	240,949,582	164.973,728	160,203,107	186,583,558	207,056,662
Winter wheat, bu	23,293,388	43,663,284	30,671,823	21,137,114	39,810,289	19,732,402	33,558,663
Spring wheat, bu	3,075,314	2,725,430	1,587,288	474,441	566,949	615,190	808,830
Oats, bu	53,424,555	61,665,473	63,366,303	55,583,493	69,894,023	104,299,230	105,314,958
Apple orchard, bu	4,940,811	5,958,690	10,342,186	2,659,527	6,557,128	6,818,520	4,152,925
Peach orchard, bu	607,292	25,749	398,970	96,507	319,911	260,923	135,329
Pear orchard, bu	13,510	6,134	35,714	14,135	9,964	7,128	4,418
Vineyards, gal	142,964	326,323	530,990	129,839	96,282	70,898	....
Timothy meadow, tons	2,056,838	1,637,525	2,067,320	1,914,237	2,191,805	5,064,460	4,948,621
Clover meadow, tons	176,635	215,677	194,048	262,464	273,846		
Prairie meadow, tons	448,658	483,064	484,188	469,743	446,050		
Hungarian and millet, tons	19,358	25,764	49,023	39,077	28,078		
Rye, bu	2,915,940	2.648,893	2,557,426	2,466,958	3,339,410	4,695,418	4,176,066
Barley, bu	703,294	980,250	841,188	539,308	509,339	674,338	1,066,607
Buckwheat, bu	155,340	112,180	62,128	16,374	63,743	49,397	57,633
Castor beans, bu	2,526	24,344	3,480	4,005	4,346	3,464	19,295
Beans, bu	18,627	36,217	15,894	3,267	9,776	15,738	21,335
Peas, bu	21,410	42,688	20,430	10,713	19,186	18,175	....
Irish potatoes, bu	5,095,477	6,685,990	5,987,554	4,472,339	7,236,562	14,483,006	11,806,082
Sweet potatoes, bu	116,994	126,169	224,522	114,486	216,283	228,605	274,004
Tobacco, lbs	2,268,492	2,741,329	2,736,407	1,747,474	2,345,931	2,195,426	3,716,408
Broom corn, lbs	11,218,168	11,161,238	14,457,156	25,708,250	9,693,182	33,022,000	16,228,000
Hemp (fibre), lbs	99,355	45,702	62,931	6,045	3,838	4,483	....
Cotton (lint), lbs	3,035	8,928	47,555	21,229	476	....	....
Flax (fibre), lbs	5,509,518	8,493,998	3,416.124	2,683,903	1,715,712	1,728,756	....
Sorgo, gal	1,174,549	1,309,400	636,216	456,714	816,892	1,272,287	1,389,248
Turnips, other root crops, value	$154,149	$722,444	$105,414	$448,389	$934,291	$897,303	$771,438
Other fruits and berries, value	197,581	185,488	231,417	301,086	279,360	267,313	250,747
Other crops, not named above, value	157,862	526,189	168,244	623,572	190,852	263,496	....
Live Stock, etc.							
Fat cattle sold, No	357,816	457,331	473,727	496,526	483,427	454,205	457,887
" " " G. Wt., lbs	365,458,112	498,463,350	493,554,661	500,974,754	563,170,713	501,501,793	500,412,461
Colts foaled, No	....	49,952	72,764	80,150	71,843	81,618	....
Fat Sheep sold, No	144,762	191,398	193,384	218,142	239,394	250,812	205,322
" " " Gr. Wt., lbs	12,531,597	18,071,371	17,807,358	19,925,207	25,734,335	25,596,495	20,603,042
Wool shorn, lbs	2,891,007	3,944,558	4,757,938	4,636,711	4,570,081	4,447,808	1,301,024
Fat hogs sold, No	2,271,493	2,543,278	2,642,606	2,468,833	2,334,194	2,834,220	2,331,374
" " " Gr. Wt., lbs	550,955,097	702,192,812	656,485,450	618,393,680	605,253,746	686,454,022	549.650,787
Cows kept, No	508,753	571,628	613,738	625,410	716,102	716,102	638,063
Butter sold, lbs	17,997,652	25,028,225	24,553,449	21,579,414	21,659,054	22,198,370	22,696,333
Cheese sold, lbs	5,139,914	6,618,212	6,187,680	5,837,974	5,252,036	4,931,826	4,795,697
Cream sold, gal	62,707	230,497	601,314	1,380,939	2,188,396	2,324,579	1,479,183
Milk sold, gal	30,567,415	96,659,854	38,986,861	40,153,488	41,433,620	43,006,273	50,056,318

Hives of bees, No.	......	......	......	86,633	131,633	131,633	......
Honey, lbs	......	......	......	618,947	2,791,301	3,263,980	......
Timothy seed, bu	261,559	213,329	400,124	426,531	320,653	385,895	389,056
Clover seed, bu	77,388	138,191	87,144	125,042	55,862	78,656	138,920
Hungarian and millet seed, bu	20,787	43,776	66,789	76,189	77,423	70,007	33,513
Cotton seed, bu	4,959	246	120	2,600	1,274	......	......
Flax seed, bu	971,015	1,621,043	1,501,530	1,055,413	595,585	218,177	272,845
Grapes, lbs	1,922,636	3,184,952	7,883,041	1,115,902	1,013,390	695,100	467,014
Tile laid, feet	......	22,030.472	44,880,760	27,409,295	37,557,625	60,975,784	......
Loss Farm Stock.							
Horses died of disease, No.	......	24,877	36,087	41,000	35,951	30,049	......
" " " Value	......	......	......	$2,251,016	$2,198,891	$1,939,434	......
Cattle died of disease, No.	......	......	......	38,574	37,088	31,692	......
" " " Value	......	......	......	$946,930	$927,658	$892,571	......
Sheep killed by dogs, No	26,047	28,694	26,107	32,914	33,078	24,410	......
" " " Value	$69,936	$215,395	$26,269	$107,018	$107,724	$87,354	......
Sheep died of disease, No.	......	......	......	58,583	50,993	45,349	......
" " " Value	......	......	......	$174,164	$161,290	$136,993	......
Hogs died of cholera, No.	1,391,422	676,738	595,025	418,502	289,308	230,823	......
" " " Gr. Wt., lbs	139,853,598	49,326,591	41,066,533	31,522,141	22,083,466	16,821,254	......
" " other diseases, No.	......	......	......	98,736	98,144	74,700	......
" " " " Gr. Wt., lbs	......	......	......	7,325,310	7,012,565	5,796,866	......

ACREAGE AS RETURNED BY ASSESSORS.

The tendency of late years to a more diversified system of agriculture in this State is illustrated in the following table, which gives the area of the crops as returned by the assessors during the past seven years.

The table shows an increase in the area of grass lands and some of the minor crops, and a decrease in the extent of some of the leading crops.

The area of corn has decreased from year to year since 1882. There has been a steady increase in the area seeded to oats during the past four years. The area of grass lands has increased from 2,168,760 acres in 1879 to 3,004,342 acres in 1884.

Farm Crops, etc.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Corn	6,649,226	7,592,152	7,258,897	6,586,201	7,296,230	7,132,762	6,898,819
Winter wheat	1,806,651	2,427,481	3,117,379	2,658,534	2,710,034	2,876,432	2,722,763
Spring wheat	221,795	274,899	179,024	83,496	93,642	44,091	50,895
Oats	1,536,904	1,703,843	1,866,337	1,759,778	2,449,840	2,722,432	2,944,602
Apple orchard	244,547	281,030	279,569	251,034	285,120	298,130	282,901
Peach orchard	13,299	5,912	8,412	6,143	7.560	9,770	6,690
Pear orchard	834	641	1,001	912	1,002	483	633
Vineyards	5,178	2,899	4,340	3,663	3.235	3,500	2,092
Timothy meadow	1,520,889	1,647,443	1.725,579	1,586,873	1,837,121	2,090,719	2,270,658
Clover meadow	122,958	174,461	164,810	248,003	295,133	340,978	314,838
Prairie meadow	385,868	442,046	425,694	313,797	449,573	455,738	410,266
Hungarian and millet	10,241	13,995	35,212	27,317	46.468	25,784	21,254
Rye	233,191	166,915	163,391	173,320	357,095	270,961	259,560
Barley	26,164	43,227	42,688	31,249	34,772	26,849	28,923
Buckwheat	16,060	10,786	6,681	3,648	2,469	3,491	3,526
Castor Beans.	361	3,084	500	758	2,098	433	1,108
Beans	1,669	2,674	1,398	1,012	983	1,091	1,621
Peas	537	779	542	419	550	562	585
Irish potatoes	81,460	92,439	92,342	72,079	106,439	116,004	125,893
Sweet potatoes	1,729	1,423	3,382	1,815	2,785	2,696	2,681
Tobacco	3,883	3,079	4,091	3,854	3,789	3,092	4,842
Broom corn	18,248	17,664	18,652	17,887	43,036	33,922	25,273
Hemp (fibre)	448	188	199	91	39	26	708
Cotton (lint)	2,484	44	131	104	28	6	....
Flax (fibre)	96,179	174,927	169,368	119,489	93,240	29,338	30,996
Sorgo	14,638	17,883	9,825	8,263	13,757	14,023	13,854
Turnips and other root crops	3,775	3,139	2,300	3,046	3,809	4,361	3,856
Other fruits and berries	3,559	3,111	7,803	7,670	5,881	4,583	10,181
Other crops not named above	20,813	29,639	18,004	17,448	46,860	19,793	35,053
Pasture	3,800,211	4,246,713	4,438,232	3,857,994	4,688,099	4,663,217	5,085,817
Woodland	3,771,015	3,708,567	3,504,058	3,123,329	3,414,717	3.575,445	3,520,002
Uncultivated land	2,300,209	2,380,228	2,070,844	2,004,749	1,856,323	1,928,250	1,884,488
Area city and town real estate (not included above)	254,111	272,127	215.820	213,637	280,426	476,870	257,616
Acreage not reported	11,333,677	8,770,006	8,675,889	11,323,752	8,079,291	7,335,622	7,286,334
Total number of acres in State	34,511,444	34,511,444	34,511,444	34,511,444	34,511,444	34,511,444	34,511,444

RELATIVE AREA OF CROPS.

The following table gives the relative area by percentage of the crops grown in the State during the past eight years.

Farm Crops, etc.	Per cent. of area to total acreage in State in 1877.	Per cent. of area to total acreage in State in 1878.	Per cent. of area to total acreage in State in 1879.	Per cent. of area to total acreage in State in 1880.	Per cent. of area to total acreage in State in 1881.	Per cent. of area to total acreage in State in 1882.	Per cent. of area to total acreage in State in 1883.	Per cent. of area to total acreage in State in 1884.
Corn	22.1824	19.332	21.9989	21.0394	19.0841	21.1414	21.3608	19.9899
Winter wheat	4.3483	5.252	7.0338	9.0321	7.7030	7.8525	8.4824	7.8894
Spring wheat	0.5101	0.645	0.7096	0.5187	0.2416	0.2713	0.1325	.1475
Oats	4.2702	4.468	4.9370	5.4080	5.0901	7.0986	7.9421	8.5322
Apple orchard	0.7981	0.702	0.8143	0.8101	0.7274	0.8261	0.8639	.8197
Peach orchard	0.0372	0.038	0.0171	0.0243	0.0178	0.0219	0.0283	.0194
Pear orchard	0.0018	0.002	0.0018	0.0029	0.0026	0.0029	0.0014	.0018
Vineyards	0.0075	0.015	0.0086	0.0125	0.0106	0.0093	0.0101	.0061
Timothy meadow	5.0449	4.421	4.7738	5.0000	4.5987	5.3232	6.0580	6.5794
Clover meadow	0.3066	0.354	0.5061	0.4755	0.7186	0.8552	0.9880	.9124
Prairie meadow	1.3066	1.122	1.3906	1.2334	0.9092	1.3026	1.3205	1.1888
Hungarian and millet	0.0487	0.029	0.0405	0.1020	0.0791	0.1347	0.0747	.0616
Rye	0.6721	0.678	8.4836	0.4734	0.5022	1.0347	0.8019	.7524
Barley	0.1303	0.076	0.1252	0.1236	0.0905	0.1007	0.0775	.0838
Buckwheat	0.0460	0.047	0.0312	0.0193	0.0106	0.0071	0.0101	.0102
Castor beans	0.0134	0.001	0.0081	0.0041	0.0022	0.0061	0.0013	.0032
Beans	0.0045	0.004	0.0077	0.0040	0.0029	0.0028	0.0032	.0047
Peas	0.0015	0.001	0.0022	0.0016	0.0012	0.0015	0.0016	.0017
Irish potatoes	0.2773	0.237	0.2678	0.2646	0.2088	0.3084	0.3441	.3648
Sweet potatoes	0.0067	0.005	0.0041	0.0097	0.0052	0.0081	0.0078	.0078
Tobacco	0.0356	0.011	0.0089	9.0118	0.0111	0.0109	0.0089	.0140
Broom corn	0.4221	0.053	0.0511	0.0540	0.0518	0.1247	0.0983	.0729
Hemp (fibre)	0.0334	0.001	0.0005	0.0005	0.0006	0.0001	0.0000	.3023
Cotton (lint)	0.0006	0.007	0.0001	0.0003	0.0006	0.0001	0.0000	.0000
Flax (fibre)	0.2588	0.279	0.5068	0.4907	0.3462	0.2701	0.5850	.0898
Sorgo	0.0560	0.042	0.0518	0.0284	0.0236	0.0398	0.0406	.0401
Turnip, other root crops	0.0204	0.011	9.0091	0.0066	0.0088	1.0110	0.0126	.0112
Other fruits and berries	0.0103	0.013	0.0090	0.0226	0.0222	0.0170	0.0133	.0295
Other crops not named above	0.1798	0.065	0.0858	0.0521	0.0505	0.1358	0.0574	.1016
Pastures	10.4679	11.049	12.2936	12.8001	11.1209	13.5842	13.7686	14.7356
Woodland	10.5059	10.863	10.7459	10.1533	9.5012	9.8944	10.3601	10.1996
Uncultivated land	5.0581	6.687	6.8969	6.0004	5.8808	5.3788	5.5873	5.4605
Area city and town real estate not included above	0.8380	0.738	0.7885	0.0625	0.6190	0.8125	1.3817	.7464
Acreage not reported	32.5212	32.612	25.4118	25.1391	32.8113	23.4105	21.1556	21.1128
	100.	100.	100.	100.	100.	100.	100.	100.

The prominence given to the cultivation of the above named crops in each county in the State in 1884 is noted below by per cent.

CORN AREA.

In Logan county the past season 41 per cent of the entire area of the county was devoted to corn; Menard and Montgomery, 36; Livingston and Morgan, 35; Ford and Macon, 34; DeWitt, Marshall, McLean and Stark, 32; Champaign, 31; Henry, Iroquois, Lee and Woodford, 30; Grundy, 29; Bureau, Kendall and Warren, 28; Christian, Henderson and LaSalle, 27; DeKalb, Knox, Putnam and Sangamon, 26; Tazewell, 25; Boone, Ogle and Vermilion, 24; Edgar and Mercer, 23; Peoria, Stephenson, Will and Winnebago, 22; McDonough, Moultrie, Piatt and Rock Island, 21; Carroll, Douglas and Whiteside, 20; Fulton, Gallatin, Hancock and Kankakee, 19; Bond and Shelby, 18; Cass, Coles, Macoupin and Madison, 17; Clinton and Kane, 16; Adams, Brown, DuPage, Effingham, Greene, Jersey and McHenry, 15; JoDaviess and Schuyler, 14; Clark, Cumberland, Edwards and Wabash, 13; Crawford, Jefferson, Lawrence, Mason, Pike and White, 12; Clay, Fayette, Jasper, Marion and Richland, 11; Hamilton and St. Clair, 10; Cook, Pulaski and Washington, 9; Calhoun, Lake, Pope, Scott and Wayne, 8; Massac, Monroe and Randolph, 7; Jackson, Johnson, Saline and Williamson, 6; Alexander, Perry and Union, 5; Hardin, 3; Franklin, 1.

WINTER WHEAT AREA.

In St Clair county the past season 30 per cent. of the entire area of the county was occupied with winter wheat; in Monroe, 28; Washington, 27; Madison and Randolph, 26; Clinton and Jersey, 23; Montgomery, 22; Gallatin, 20; Pike, 19; Edwards, Jefferson, Macoupin, Menard and Wabash, 18; Greene, 17; Lawrence, 16; Bond, Christian and Perry, 15;

Brown, Calhoun, Jackson, Richland and White, 14; Crawford, Cumberland, Effingham and Massac, 13; Edgar, Marion and Schuyler, 12; Clark, Fayette, Morgan and Shelby, 11; Alexander, Clay, Jasper, Johnson, Sangamon and Union, 10; Pope, Pulaski and Williamson, 9; Cass, Coles, Hamilton, Logan and Macon, 8; Fulton, Moultrie, Saline, Scott and Tazewell, 7; Champaign and Wayne, 6; Douglas, Hancock and Vermilion, 5; Piatt, 4; DeWitt, Mason and McDonough, 3; Franklin, Hardin, Henderson and Stephenson, 2; Carroll, Iroquois, JoDaviess, McLean, Ogle, Peoria, Putnam and Woodford, 1. In the following counties less than one per cent. of the area was occupied with winter wheat last season, viz: Boone, Bureau, Cook, DeKalb, DuPage, Ford, Grundy, Henry, Kane, Kankakee, Kendall Knox, Lake, LaSalle, Lee, Livingston, Marshall, McHenry, Mercer, Rock Island, Stark, Whiteside, Will, Winnebago and Warren.

AREA IN OATS.

In Livingston, Ogle, Will and Winnebago counties the past season 17 per cent. of the entire area of the county was occupied with oats; in Boone and Woodford, 16; DeKalb, Henry, Kendall, McLean, Stark and Stephenson, 15; Grundy and Marshall, 14; Ford, Iroquois, Knox, LaSalle and Warren, 13; Champaign, Cook, Lee and Mercer, 12; Bureau, Carroll, DeWitt, Kane, Macon, Peoria and Tazewell, 11; Hancock, JoDaviess, Kankakee and McHenry, 10; DuPage, Henderson, Lake, Logan, McDonough, Putnam, Rock Island, Washington and Whiteside, 9; Clinton, Montgomery and Vermilion, 8; Bond, Clay, Douglas, Marion and Moultrie, 7; Adams, Christian, Edwards, Fayette, Fulton, Piatt, Richland and Shelby, 6; Clark, Cumberland, Jasper, Jefferson, Menard, Randolph and St. Clair, 5; Cass, Coles, Edgar, Macoupin, Madison, Perry, Sangamon and Schuyler, 4; Crawford, Gallatin, Hamilton, Jersey, Lawrence, Monroe, Morgan, Wabash and Wayne, 3; Greene, Jackson, Mason, Pike and White, 2; Calhoun, Effingham, Johnson, Massac, Pope, Pulaski, Saline, Union and Williamson, 1. In the following counties less than 1 per cent. was occupied by oats, viz: Alexander, Brown, Franklin, Hardin and Scott.

AREA IN MEADOW.

The area in meadow the past season in DuPage county was 20 per cent. of the total acreage of the county; in Cook, 19; DeKalb and Kane, 18; Will, 17; Grundy, Lake and McHenry, 16; Boone, Kankakee, Kendall and Lee, 15; Livingston, 13; JoDaviess, LaSalle, Marshall, Ogle, Rock Island and Winnebago, 12; Carroll, Ford, Henry, Iroquois, Knox, Stephenson, Tazewell and Whiteside, 11; Bureau, Christian, Cumberland, Douglas and Mercer, 10; Edgar, Hancock, McLean, Menard, Peoria, Richland, Shelby, Stark, Vermilion and Warren, 9; Champaign, Clay, Edwards, Effingham, Macon, Morgan and Woodford, 8; Adams, Brown, Clark, Coles, DeWitt, Fulton, Jasper, Marion, Montgomery, Macoupin, Madison, McDonough, Moultrie, Sangamon and Schuyler, 6; Bond, Crawford, Fayette, Gallatin, Greene, Logan, St. Clair, Wabash and White, 5; Clinton, Hamilton, Jackson, Jersey, Johnson, Monroe, Piatt, Pike, Pulaski, Randolph and Williamson, 4; Calhoun, Jefferson, Massac, Perry, Saline and Union, 3; Cass, Pope and Washington, 2; Alexander, Franklin, Hardin, Mason and Scott, 1.

AREA IN PASTURES.

The area in pastures the past season in McHenry was 34 per cent. of the total acreage of the county; Warren, 31; Kane, 30; Boone and DeKalb, 29; Lake, 27; Henderson, Knox and Mercer, 26; Putnam, 24; Edgar, Grundy, Henry and Kendall, 23; DuPage, Morgan, Vermilion, Will and Winnebago, 22; Hamilton, JoDaviess, McLean and Rock Island, 21; Carroll, Sangamon and Stark, 20; Bureau, DeWitt, Douglas, Menard, Ogle and Whiteside, 19; Marshall and Stephenson, 18; Champaign, Logan and Richland, 17; Cook, Greene, Iroquois, Lee, Livingston and Macon, 16; Calhoun, Christian, LaSalle, Macoupin and Montgomery, 15; Brown, Kankakee, McDonough, Schuyler and Tazewell, 14; Coles, Hancock, Peoria, Shelby and Woodford, 13; Effingham, Ford, Fulton, Lawrence and Moultrie, 12; Bond and Cumberland, 11; Adams, Cass, Jersey and Madison, 10; Clark, Crawford, Marion and Wabash, 9; Edwards and Jefferson, 8; Clay, Clinton, Jasper, Piatt, Pike and Washington, 7; Fayette and White, 6; Wayne, 5; Gallatin, Randolph, Scott and St. Clair, 4; Jackson, Monroe, Pope and Williamson, 3; Hardin, Johnson, Massac, Perry, Saline and Union, 2; Alexander, Franklin and Pulaski, 1.

VALUE OF LAND PER ACRE.

The equalized value per acre of lands in this State for 1884 was determined by the State Board of Equalization upon a fifty per cent. valuation, and its full valuation has been determined by increasing the amount one hundred per cent.

The price per acre of the land is much below the market value, as is generally the case where lands are valued for taxation.

In counties where there are large cities the value of lands is influenced by their contiguity to large centers of population, and the relative value of business and suburban property and land for farming purposes should be considered.

The counties are arranged according to the value of the lands as determined upon the above basis, commencing with counties having the highest valuation.

In Cook county the lands are valued at $81.84 per acre; in St. Clair, $48.22; Madison, $35.46; Kane, $35.42; Sangamon, $33.54; DuPage, $33.36; Peoria, $31.60; Knox, $31.50; Stark, $30.80; Morgan, $30.62; McLean, $29.90; Adams, $29.76; Macon, $29.66; Logan, $29.64; Woodford, $28.84; Tazewell, $28.78; McDonough, $27.92; Macoupin, $27.88; Boone, $27.80; LaSalle, $27.76; Bureau, $26.84; Warren, $26.82; Stephenson, $26.20; Ogle, $26.14; Champaign, $26.12; Lake and Vermilion, $26.06; DeKalb, $26.02; Henry, Kendall and Will, $26; Menard, $25 92; Winnebago, $25.88; Greene, $25.18; Edgar, $25.12; Coles, $25.10; Marshall, $25.02; DeWitt, $24,22; Montgomery, $24.12; Douglas and Putnam, $24.10; Christian, Hancock and Piatt, $24.08; Fulton and Jersey, $23.34; Scott, $23.32; McHenry, $23.24; Mercer, $23.12; Carroll, $22.44; Whiteside, $22.38; Grundy, $22.26; Lee, $22,18; Cass, $21.46; Livingston, $21.40; Pike, $21.26; Rock Island, $20.34; Shelby, $18.80; Schuyler, $18.64; Kankakee and Bond, $18.62; Iroquois, $18.60; Monroe, $18.58; Moultrie and Washington, $18.54; Henderson and Clinton; $16.74; Mason, $16.70; Ford, $16.68; Randolph, $15.80; JoDaviess, $15.74; Wabash, $14.96; Brown, $14.90; Edwards, $14.88; Clark, $13.96; Crawford and Fayette, $12.06; Lawrence, $11.18; White, $11.16; Marion, $11.14; Cumberland, $11.10; Perry, $10.20; Williamson, $10.18; Effingham, $9.36; Jasper, $9.32; Jefferson and Richland, $9.30; Clay and Union, $9.28; Jackson, $8.36; Massac, $7.46; Franklin, Hardin and Saline, $7.44; Gallatin, $7.42; Alexander and Wayne, $6.52; Calhoun, Pope and Pulaski, $6.50; Hamilton and Johnson, $6.48.

TAXATION PER ACRE.

The taxation per acre paid in each county in the State includes State, county, township, school, road and bridge taxes, registered bond fund, and all other taxes, except city and incorporated town tax.

Commencing with the counties in which the taxes per acre in 1884 are the highest, the order of precedence will be as follows: The rate of taxation in Cook county is $8.60; Peoria, $1.15; Kane, $1.10; Rock Island and St. Clair, 0.87; Madison, 0.81; LaSalle, 0.80; Alexander, 0.78; Moultrie, 0.75; Sangamon, 0.74; Lee, 0.72; Adams and Macon, 0.70; Logan and Stark, 0.69; Vermilion, 0.68; DeWitt, 0.64; Macoupin, 0.63; McLean and Will, 0.62; Henderson and Tazewell, 0.61; Coles, 0.59; Edgar, 0.58; Kankakee, 0.57; DuPage, Grundy and Knox, 0.54; Piatt and Wabash, 0.52; Champaign, Christian, Douglas, Morgan, Stephenson and Warren, 0.51; Fulton and Winnebago, 0.50; Bureau, Cass and Kendall, 0.49; Jersey and Whiteside, 0.48; Henry, Livingston, Menard and Mercer, 0.47; Gallatin, Marshall, McDonough and Woodford, 0.46; McHenry and Ogle, 0 45; DeKalb and Randolph, 0.44; Hancock, Mason and Shelby, 0.43; Clark and Pike, 0.42; Ford, Greene, Johnson and Montgomery, 0.41; White, 0.40; Boone, 0.39: Lake and Putnam, 0.38; Carroll, 0.37; Iroquois and Richland, 0.36; JoDaviess and Scott, 0.34; Brown, Jackson and Pulaski, 0.33; Edwards and Schuyler, 0.32; Bond, Clinton, Monroe and Washington, 0.31; Crawford and Cumberland, 0.30; Marion and Perry, 0.29; Fayette, 0.28; Jasper, 0.27; Clay, Effingham, Franklin, Hamilton and Massac, 0.26; Jefferson, 0.25; Lawrence and Saline, 0.24; Union, 0.23; Williamson, 0.22; Wayne, 0.20; Hardin and Pope, 0.16, and Calhoun, 0.13.

PER CENT. OF ANNUAL SALES OF FARM TO VALUE OF LAND.

The full value of lands in the several counties in the State, in 1884, based upon the returns of the State Board of Equalization, is given below.

It will be seen that the per cent. of value of the farm crops and live stock marketed in 1884, to the full value of the land, in many counties indicates a very low valuation of some of the most productive lands in the State.

In Gallatin county the full value of the lands in 1884, as determined by the State Board of Equalization, was $7.42 per acre, while the average value of the live stock marketed was 53 cents, and the average value per acre of farm crops produced in 1884 was $5.87,—a total average per acre for the stock and crop returns, for the season of 1884, of $6.40, or 86 per cent. of the assessed value of the land.

In Pulaski county the returns for crop and stock products produced in 1884 amounted in value to 61 per cent. of the full equalized value of the land, and the per cent. is as follows in the remaining counties of the State: Calhoun, 56 per cent.; McHenry, 58; JoDaviess 57; Union, 51; Pope, 50; Boone, 49; DeKalb, 48; Johnson and Massac, 46; Brown, 45; Cumberland, DuPage and Effingham, 44; Carroll, Henderson, Jackson, Kane and Lee, 42; Monroe and Richland, 41; Saline, 40; Stephenson and Wayne, 39; Jefferson, Ogle, Randolph, White and Winnebago, 38; Alexander and Schuyler, 37; Clinton, Edwards, Grundy, Lawrence, Putnam and Warren, 36; Clay, Livingston, Mercer, Rock Island, Stark and Will 35; Kendall, 34; Ford, Henry, Iroquois, Lake and Marshall, 33; Jasper and Menard, 32; Kankakee, Pike and Whiteside, 31; Fulton, Jersey, Knox, LaSalle, Macon, Shelby, Wabash and Williamson, 30; Bureau, Crawford and Morgan, 29; Christian and DeWitt, 28; Marion, McDonough, McLean and Vermilion, 27; Clark, Greene and Montgomery, 26; Champaign, DuPage, Fayette, Hancock, Hardin, Logan and Moultrie, 25; Woodford, 24; Adams, Bond, Cass, Tazewell and Washington, 23; Coles, Douglas, Madison and Peoria, 22; Macoupin, Perry and Sangamon, 21; Hamilton and Piatt, 19; St. Clair, 16; Scott, 15; Franklin, 12; Mason, 11; and Cook, 10.

LIVE STOCK.

The attention given to the breeding of farm animals in this State is illustrated in the following tables, which give the toal number and value of horses, cattle, sheep and hogs. as well as the number of head of stock to each square mile in the State during the last five years.

It will be seen that there was a slight increase in the number of horses and cattle in the State in 1884 as compared with the previous year, and a decrease in the number of hogs and sheep.

The aggregate value of farm animals in 1884 is some less than in 1882 and 1883.

Stock.	Total number returned by assessors.				
	1880.	1881.	1882.	1883.	1884.
Horses	912,586	981,909	913,005	915,136	916,909
Cattle	1,999,788	2,045,366	2,012,902	1,969,867	1,990,927
Hogs	3,133,557	2,872,074	3,390,335	3,287,693	2,808,898
Sheep	964,696	1,088,544	1,203,183	1,264,202	933,330

FULL VALUE.

Horses	$48,479,968	$50,839,620	$51,524,262	$52,883,390	$51,107,888
Cattle	39,791,968	41,057,792	40,995,932	41,162,822	40,353,396
Hogs	9,600,728	10,709,600	10,910,322	11,535,556	10,411,480
Sheep	2,493,644	2,806,704	2,699,362	2,528,404	1,167,708
Totals	$100,366,308	$105,410,716	$106,126,878	$108,110,172	$105,039,970

DISTRIBUTION OF STOCK.

Stock.	Average number to each square mile in State.				
	1880.	1881.	1882.	1883.	1884.
Horses	16	17	17	17	17
Cattle	35	38	37	34	36
Hogs	56	53	63	61	52
Sheep	18	29	22	22	17

The counties taking precedence in the number of farm animals to each square mile in the State are as follows: In horses, Cook, Kane, DeKalb, Boone, Stark, Warren, McLean and McDonough. In the following dairy counties the number of cattle to each square mile exceeds those in other counties in the State, viz: Kane, McHenry, DeKalb, Boone and DuPage. The counties of Stark, Mercer, Stephenson, Warren and Henry take precedence in the number of hogs to each square mile in the State.

Sheep breeding receives more attention in the counties of Lake, McHenry and Edwards than in any other counties in the State.

HORSES.

The attention given to horse breeding in the several counties in the State is indicated below.

It requires over fifty thousand horses to make an additional animal to each square mile. The number of horses to each square mile has averaged seventeen for the past four years.

It has been the practice of the State Board of Equalization of late years to rate property at 50 per cent. of its equalized cash value, and in determining the value of horses the amount reported for this period should be increased one hundred per cent.

The following table gives the number and value of the horses in the State the past twenty-eight years, as returned by assessors:

HORSES.

Year.	Assessors' Returns.		Number colts foaled.	Died of Disease.		Av. No. to each square mile.
	Number.	Value.		Number.	Value.	
1856	407,736	$23,118,584				
1857	467,531	25,434,171				
1858	513,030	23,680,592				
1859	532,247	21,404,351				
1860	590,963	22,359,202				
1861	625,242	21,064,138				
1862	664,194	19,893,415				
1863	652,500	21,714,620				
1864	723,751	25,148,408				
1865	793,259	28,055,559				
1866	792,751	27,364,215				
1867	843,610	32,625,865				
1868	854,852	29,025,015				
1869	874,237	27,702,942				
1870	875,009	25,081,419				
1871	880,254	23,986,565				
1872	892,250	23,450,717				
1873	932,002	48,855,005				
1874	926,573	42,549,570				
1875	923,468	37,813,706				
1876	929,940	34,332,380				
1877	915,995	31,054,628				
1878	904,948	26,817,560				
1879	887,238	23,624,921	49,952	24,877	$1,417,989	16
1880	912,586	24,239,974	72,764	36,087	2,056,959	16
1881	981,909	25,418,310	80,150	41,000	2,251,016	17
1882	913,005	25,762,131	71,843	35,951	2,198,881	17
1883	915,136	20,341,695	81,618	30,049	1,939,434	17
1884	916,909	26,053,694				17

The following counties are entitled to precedence according to the number of colts foaled in 1883: In McLean there were 3,283 foals; LaSalle, 2,987; Livingston, 2,389; Warren, 2,128; Bureau, 2,116; Iroquois, 2,048; Knox, 1,868; Fulton, 1,837; Henry, 1,772; Sangamon, 1,719.

In the following counties there are cities having upwards of ten thousand inhabitants, and the number of horses required for business purposes therein should be taken into consideration in determining the interest given to horse breeding at these large centres of population, viz: Adams (Quincy), Cook (Chicago), Kane (Aurora and Elgin), Knox (Galesburg), McLean (Bloomington), Macon (Decatur), Peoria (Peoria), Rock Island (Rock Island), Sangamon (Springfield), St. Clair (Belleville and East St. Louis), Will (Joliet), Winnebago (Rockford).

Commencing with the counties having the largest number of horses to each square mile in 1883, the counties take precedence as follows: In Cook county there were 45 horses to each square mile; in Kane and Stark, 24; Boone, DeKalb, Knox, LaSalle, McDonough, McLean and Warren, 23; Henry, Livingston, Mercer, Ogle and Winnebago, 22; Kendall, Macon, Peoria and Sangamon, 21; Bureau, McHenry, Stephenson, Whiteside and Woodford, 20; Coles, DeWitt, Douglas, DuPage, Macoupin, Putnam, Rock Island and Vermilion, 19; Champaign, Christian, Edgar, Fulton, Grundy, Hancock, Iroquois, Logan, Marshall, Montgomery, Moultrie, Piatt, Shelby, Tazewell and Will, 18; Carroll and Henderson, 17; Brown, JoDaviess, Lee and Scott, 16; Adams, Lake and Schuyler, 15; Bond, Edwards, Fayette, Ford, Greene, Jersey, Madison and Marion, 14; Effingham, Menard, Pike and St. Clair, 13; Cass, Clark, Clay, Cumberland, Hamilton, Jefferson and Lawrence, 12; Crawford, Jasper, Kankakee, Morgan, Washington, White and Williamson, 11; Clinton, Franklin, Gallatin, Richland and Union, 10; Perry, Randolph and Wabash, 9; Jackson, Mason, Monroe, Pope, Saline and Wayne, 8; Hardin, Johnson and Pulaski, 7; Alexander and Calhoun, 6; Massac, 5.

CATTLE.

The following table gives the number and assessed value of cattle, as well as the number, weight and value of cattle marketed in the State during the past twenty-nine years. The value of cattle of late years has been fixed upon a basis of one-half the market value by the State Board of Equalization.

Year.	Assessors' Returns.		Estimated per cent. marketed.	Number beef cattle marketed.	Av. gross weig't per head.......	Total gross weight.	Value per 100 pounds gross.	Value beef cattle marketed.
	Number.	Value....						
1856............	1,169,855	$15,572,065	20	239,971	*1,000	233,971,000	*$4 75	$11,113,622
1857............	1,351,209	16,171,830	20	270,242	*1,000	270,242,000	*4 75	12,836,495
1858............	1,422,249	44,442,821	20	284,450	*1,000	284,450,000	*4 75	13,541,375
1859............	1,336,565	12,371,600	20	267,513	*1,000	267,513,000	*4 75	12,706,867
1860............	1,425,978	12,468,537	20	285,196	*1,000	285,196,000	*5 00	14,259,800
1861............	1,428,362	11,494,803	20	285,672	*1,000	285,672,000	*5 00	14,283,000
1862............	1,603,946	11,032,662	20	320,790	*1,000	320,790,000	*5 00	16,039,500
1863............	1,684,892	12,699,732	20	336,978	*1,000	336,978,000	*5 00	16,848,900
1864............	1,870,783	13,709,418	20	374,157	*1,000	374,157,000	5 05	13,844,928
1865............	1,568,230	14,285,862	20	213,656	*1,000	213,656,000	5 70	12,178,392
1866............	1,435,769	13,279,620	20	287,154	*1,000	287,154,000	5 60	16,080,626
1867............	1,486,381	17,179,165	20	297,276	*1,000	297,276,000	5 75	17,093,370
1868............	1,520,963	15,810,830	20	304,195	1,085	340,049,405	5 75	18,977,840
1869............	1,584,445	15,497,350	20	316,889	1,103	346,528,567	5 70	19,923,130
1870............	1,578,015	14,555,331	20	315,603	1,110	350,319,330	5 85	20,493,679
1871............	1,611,349	14,605,415	20	329,270	1,129	363,842,830	4 75	17,282,533
1872............	1,684,029	14,778,925	20	336,809	1,137	382,948,422	4 85	18,572,997
1873............	2,015,819	35,776,899	20	403,164	1,145	461,622,780	4 50	20,773,026
1874............	2,042,327	31,928,374	20	408,465	1,152	470,551,689	4 85	22,821,757
1875............	1,985,155	28,323,950	20	397,031	1,147	455,394,557	4 85	22,086,633
1876............	1,857,301	24,827,932	20	371,460	1,156	429,407,760	4 05	17,891,016
1877............	1,750,931	21,677,643	24	423,984	1,097	448,151,088	4 25	19,046,421
1878............	1,775,401	19,861,633	20	357,816	1,021	365,458,112	3 45	12,608,304
1879............	1,862,265	18,893,811	24	457,331	980	448,463,450	3 50	15,696,219
1880............	1,999,788	19,895,484	23	473,727	1,042	493,554,661	3 64	18,014,743
1881............	2,045,366	20,528,846	23	470,424	1,129	531,230,052	4 15	21,950,890
1882............	2,012,902	20,497,966	23	462,943	1,118	517,619,770	4 45	23,135,715
1883............	1,959,867	20,581,411	23	453,055	1,062	481,144,410	4 25	20,448,637
1884............	1,990,927	20,176,698	23	457,887	1,093	500,412,461	4 50	22,521,246

* Estimated.

The increase in the assessed number of cattle in the State in 1884, as compared with the previous year, is 21,060. The depressed condition of the times has had much to do with the depreciation in the aggregate value of the cattle of the State.

Increased attention is given each succeeding year to the improvement of cattle in this State, and cattle of less than the average in quality are the exception.

In point of number the following leading cattle counties are entitled to precedence: In LaSalle county there were 53,344 head of cattle at time of last assessment; in McLean, 50,169; Ogle, 49.717; McHenry, 47,025; DeKalb, 45,324; Henry, 42,851; Iroquois, 42,720; Bureau, 49,983; Knox, 39,479; Sangamon, 39,428, and Will, 39,383.

The number of cattle on the average to each square mile in the State is thirty-six head, an increase of two head to each square mile as compared with the previous year.

The latest returns show that there are 93 head of cattle of all ages to each square mile in Kane county; McHenry, 78; DeKalb, 72; Boone, 70; DuPage, 68; Ogle, 66; Stephenson, 65; JoDaviess, 64; Winnebago and Peoria, 63; Carroll, 61; Kendall, 59; Mercer, 58; Knox, 56; Whiteside, 55; Henry, 53; Lee, 50; Cook and Lake, 49; Rock Island and Will, 48; LaSalle, Stark and Warren, 47; Bureau and Sangamon, 46; Douglas and McDonough, 45; Edgar, 44; Grundy and McLean, 43; Coles, Hancock and Henderson, 42; Fulton and Putnam, 41; Iroquois and Marshall, 39; Schuyler, 38; DeWitt and Vermilion, 37; Woodford, 36; Edwards and Macon, 34; Christian, Livingston, Moultrie and Tazewell, 33; Menard, Morgan, Piatt and Shelby, 32; Brown, Champaign and Greene, 31; Kankakee and Macoupin, 30; Adams, Cass and Logan, 29; Montgomery and Scott, 25; Clark, Cumberland, Ford, Hamilton, Jasper, Lawrence and Pike, 24; Clay and Wayne, 23; Effingham, Jersey, Richland and White, 22; Marion, 21; Crawford, Fayette, Jefferson, Union, Wabash and Williamson, 20; Bond and Madison, 18; Gallatin, Pope, Randolph and St. Clair, 17; Franklin, Hardin, Pulaski, Saline and Washington, 16; Jackson, 15; Clinton, Johnson and Massac, 14; Alexander, Mason and Perry, 12; Calhoun, 11; Monroe, 10.

HOGS.

There is a large decrease in the number of hogs as compared with the previous year. According to the returns of assessors, there were 3,414,739 head of hogs in the State in 1883, and 2,008,898 hogs in 1884, a decrease during the year of 605,841.

The average gross weight of the fat hogs marketed the past season is less than that of any of the preceding twenty-eight years, with the exception of 1833.

The average price of $4.50 per hundred gross weight, obtained during the past year, is much below the average for a term of years.

The following counties are entitled to precedence in the number of hogs reported by the assessors in 1884: In McLean county there were 72,307 head of hogs; Henry, 56.017; Fulton, 55,944; Bureau, 53,638; LaSalle, 51,644; Livingston, 48,722; Knox, 47,655; Ogle, 46,118, and Sangamon, 44,052.

The following table gives the number and value of hogs as returned by assessors during the past twenty-nine years, as well as the number and value of fat hogs marketed during that period.

Year.	Assessors' Returns.		Estimated per ct. marketed	Number fat hogs marketed.	Av. gross weight per head	Total gross weight.	Value per 100 lbs. gross	Total value hog product.
	Number	Value						
1856	1,596,903	$3,375,247	70	1,117,832	†262	292,871,984	$4 75	$13,911,420
1857	1,893,585	4,032,588	70	1,325,509	†262	347,283,358	3 90	13,544,049
1858	1,908,603	3,482,116	70	1,336,022	†262	350,037,764	5 05	17,676,909
1859	1,725,328	2,495,042	70	1,207,730	†262	316,425,260	4 70	14,871,989
1860	1,530,256	2,745,915	70	1,071,179	†262	280,648,898	4 55	12,769,525
1861	2,196,581	4,032,874	70	1,537,607	†262	402,853,034	2 45	9,869,898
1862	2,601,395	3,198,807	70	1,820,976	†262	477,095,712	3 35	15,982,706
1863	2,506,138	3,294,729	70	1,754,296	†262	459,625,552	5 35	24,589,964
1864	2,044,844	2,799,158	70	1,431,391	†262	375,024,442	11 45	42,940,294
1865	1,743,005	3,359,621	70	1,220,103	288	351,389,664	9 35	32,854,937
1866	2,007,500	4,474,354	70	1,405,250	290	407,522,500	5 75	23,432,544
1867	2,616,814	5,230,731	70	1,831,770	251	459,774,270	6 35	29,195,668
1868	2,300,150	3,692,869	70	1,610,105	257	418,796,985	8 15	33,724,455
1869	2,056,304	3,929,832	70	1,429,413	256	365,929,728	9 20	33,665,532
1870	2,220,651	4,114,108	70	1,554,456	287	446,128,872	5 25	23,421,767
1871	2,938,749	4,613,529	70	2,057,124	284	584,223,216	4 10	23,953,151
1872	3,292,165	4,060,736	70	2,004,515	290	668,309,350	3 75	25,061,599
1873	3,560,192	11,279,720	70	2,492,134	267	665,399,778	4 35	28,944,891
1874	3,452,213	8,972,402	70	2,416,549	261	630,719,289	6 05	41,942,833
1875	2,803,969	8,157,128	70	1,966,978	271	533,051,038	7 05	37,580,095
1876	2,665,935	8,934,673	70	1,866,154	268	500,129,272	5 75	28,757,435
1877	2,961,366	7,580,920	82	2,455,573	252	618,804,396	4 25	26,299,187
1878	2,335,550	4,991,275	68	2,271,493	242	550,955,097	2 80	15,426,743
1879	2,799,051	3,812,328	90	2,543,278	276	702,102,812	3 30	23,169,392
1880	3,233,557	4,800,364	84	2,642,606	248	656,485,450	4 00	26,259,416
1881	2,872,074	5,354,800	71	2,039,149	231	492,096,606	5 26	25,946,974
1882	*3,390,335	5,455,161	83	2,813,961	244	686,908,678	6 40	43,832,117
1883	*3,414,739	5,767,778	83	2,834,220	233	686,454,022	4 75	32,772,001
1884	2,808,898	5,205,740	83	2,361,374	236	549,650,787	4 50	24,886,854

† Estimated. * Agricultural statistics returned by assessors.

The total value of the hog product of the State for 1884 is less than that of any year since 1872, with the exception of 1878 and 1879.

In 1880 there were 58 hogs on the average to the square mile; in 1881, 53; in 1882, 63; in 1883, 63; in 1884, 52.

The average number of hogs in each county in the State in 1884 per square mile, is as follows: In Stark, 119; Mercer, 86; Stephenson and Warren, 85; Henry, 84; Knox, 82; McDonough, 80; Fulton, 78; McLean, 75; DeKalb, 73; Macon and Marshall, 72; Peoria, 71; Logan, 69; DeWitt, 68; Piatt and Woodford, 67; Schuyler, 66; Kendall, 64; Boone and Coles, 63; Christian, Sangamon and Scott, 62; Henderson, JoDaviess and Putnam, 61; Adams, Brown, Douglas and Winnebago, 59; Livingston, Moultrie and Rock Island, 57; LaSalle, Menard, Shelby and Vermilion, 56; Tazewell, 55; Whiteside, 54; Champaign, Edwards, Hamilton and Montgomery, 53; Pike and Williamson, 52; Hancock, Kane and Macoupin, 51; Greene, 49; Edgar and White, 48; Pope, 46; Hardin, 45; Madison and Union, 44; DuPage, Johnson, Lee and McHenry, 43; Cass, Fayette, Iroquois, Morgan and Saline, 42; Crawford, Cumberland and Ford, 41; Jersey, 40; Clark, Franklin and Gallatin, 38; Clay, Jefferson and Lawrence, 36: Jasper, 35; Massac and Wabash, 33; Marion, 32; Randolph and St. Clair, 31; Bond and Jackson, 30; Effingham and Pulaski, 29; Grundy and Lake, 28; Monroe, Washington and Will, 26; Richland, 25; Calhoun and Wayne, 24; Alexander, Clinton and Mason, 23; Cook, 16; Perry, 15; Kankakee, 14.

SHEEP.

The assessors' returns for 1884 show that the number of sheep in the State is less than that of any year since 1862, with the exception of the years 1875, 1876, 1877, 1878 and 1879.

The low price of wool the past few years has had much to do with the decrease in the number of sheep.

The number and value of sheep assessed, as well as the number and value of fat sheep marketed in the State during the past twenty-nine years, are given in the following table:

Year.	Assessors' Returns.		Estimated per ct. marketed.	Number fat sheep marketed.	Av. gross wt. per head....	Total gross weight.	Value per 100 lbs., gross....	Value fat sheep product.
	Number.	Value.						
1856....................	786,433	$940,034	20	157,286	†90	14,155,740	†$3 50	$495,450
1857....................	760,602	881,126	20	152,120	†90	13,690,300	†3 70	506,560
1858....................	760,793	806,455	20	152,158	90	13,694,220	.2 30	314,967
1859....................	647,334	682,082	20	129,467	91	11,791,497	3 80	447,694
1860....................	584,430	695,035	20	116,886	95	11,104,170	3 39	366,440
1861....................	731,879	747,437	20	146,276	104	15,212,704	3 30	366,439
1862....................	913,024	982,285	20	182,605	102	18,625,710	3 90	625,402
1863....................	1,206,625	1,910,654	20	241,325	110	26,575,750	4 95	1,214,012
1864....................	1,606,144	2,876,696	20	321,229	111	35,656,319	5 91	2,107,293
1865....................	2,165,972	3,955,102	20	433,194	†90	38,987,400	5 65	3,202,788
1866....................	2,415,980	3,283,595	20	483,016	104	50,233,664	4 35	2,185,196
1867....................	2,599,998	3,512,590	20	519,999	98	50,950,902	†4 25	2,195,796
1868....................	2,336,716	2,337,896	20	467,343	†90	42,960,870	3 80	1,598,314
1869....................	1,957,513	1,612,472	20	391,513	85	33,278,605	3 85	2,281,226
1870....................	1,434,236	994,610	20	286,847	†90	25,816,230	4 19	1,058,464
1871....................	1,073,497	732,254	20	214,699	†90	19,322,910	4 40	850,207
1872....................	1,010,475	1,024,468	20	202,095	†90	17,188,550	4 15	754,826
1873....................	1,092,104	2,135,593	20	218,421	†90	19,657,890	4 75	933,750
1874....................	1,036,831	1,676,090	20	207,366	†90	18,962,944	4 40	821,168
1875....................	928,056	1,399,397	20	185,611	†90	16,704,990	4 90	818,545
1876....................	824,854	1,185,736	20	164,971	†90	14,847,390	4 50	668,133
1877....................	757,105	1,008,054	*31	241,422	95	23,176,512	4 40	1,019,766
1878....................	775,757	893,036	*18	144,762	86	12,531,597	3 80	476,201
1879....................	847,101	930,607	*22	191,398	94	18,071,371	2 98	538,528
1880....................	964,696	1,246,822	*20	193,384	92	17,807,358	3 40	605,448
1881....................	1,088,544	1,403,352	*24	261,230	101	26,550,072	3 55	938,861
1882....................	‡1,203,183	1,348,181	22	264,576	101	26,641,005	3 60	954,863
1883....................	‡1,141,104	1,264,202	22	251,031	102	25,506,495	3 40	874,853
1884....................	933,330	1,083,853	22	205,322	100	20,603,042	3 30	679,758

† Estimated. * Assessors' returns. ‡ Ag. statistics returned by assessors.

The value of fat sheep has not been lower than the past season (1884) but twice (1858 and 1879) during the past twenty-nine years.

DISTRIBUTION OF SHEEP.

The number of sheep in the State to the square mile will average 17 head.

The following counties take the lead of the other counties in the State in point of number of sheep, as shown by the last assessment:

In Lake county there were 55,513 head of sheep; McHenry, 36,728; McLean, 29,699; Vermilion, 27,639; Shelby, 22,091; Fulton, 21,382; Macoupin, 18,899; Wayne, 16,846; Montgomery, 16,381; Sangamon, 15,915.

The average number of sheep in each county of the State, in 1884, per square mile, is as follows: In Lake, 125; McHenry, 61; Edwards, 56; DeWitt, 38; Crawford, 35; Richland, 33; Boone, 32; Vermilion, 31; Shelby, 29; Kendall, 28; Brown and Williamson, 27; Bond, Clay and Edgar, 26; Fulton, Lawrence, McLean and Stark, 25; Wayne, 24; Fayette, Knox, Marion and Montgomery, 23; Hamilton, Macoupin, Pope, Saline and Wabash, 22; Jasper and Winnebago, 21; Jefferson and Marshall, 20; Christian, Clark, Coles, Johnson and Kendall, 19; McDonough and Sangamon, 18; Adams, DuPage, Franklin, Knox and Randolph, 17; Douglas, Effingham, Hardin, Kane, Pike, Schuyler and Tazewell, 16; Cumberland, JoDaviess, Menard, Morgan, Scott, Stephenson and Union, 15; Champaign, Clinton, Jersey, Mason, Madison, Peoria, Putnam and White, 14; DeKalb, Greene and Piatt, 12; Bureau, LaSalle, Logan, Moultrie, Warren and Washington, 11; Ford, Mercer and Ogle, 10; Gallatin, Henry, Perry, St. Clair and Woodford, 9; Hancock, Jackson and Lee, 8; Livingston, Pulaski, Rock Island and Whiteside, 7; Carroll, Iroquois and Will, 6; Grundy, Henderson, Kankakee, Massac and Monroe, 5; Alexander, Cass and Cook, 4; Calhoun, 3; Mason, .

WOOL.

The amount of wool produced in the State in 1884, of, 4,584,935 pounds, exceeds that of either of the preceding years. The value per pound of wool the past season is less than that of the preceding seven years, and, with the exception of 1878, the aggregate value of the late wool clip of the State is less than that of any year mentioned in the following table, which gives the amount and value of the past eight wool clips of the State.

The table is compiled from the assessors' returns and the statistical reports made to the Illinois Department of Agriculture.

WOOL.

Year.	Number pounds shorn	Value per pound.	Total value.
1877	3,291,677	$0 30	$987,503
1878	2,891,087	25	722,752
1879	3,944,558	35	1,380,595
1880	4,757,938	34	1,617,698
1881	4,636,711	29	1,344,646
1882	4,570,081	27	1,233,922
1883	4,447,808	26	1,099,822
1884	4,534,935	21	912,418

VALUE OF ANIMAL PRODUCTS.

The annual value of the animal products in 1884 exceeded one million of dollars in twenty-one counties.

The dairy counties of the State make a very favorable showing for this large and growing industry, which has added so largely to the wealth of the northern division of the State.

The value of animal products in Kane county in 1884 was $2,712,676, an amount approached only in McHenry county, where the value of animal products was $2,249,526. The other counties in the State take precedence as follows: DeKalb, $1,910,526; LaSalle, $1,719,096; McLean, $1,701,475; Cook, $1,603,422; Bureau, $1,375,658; DuPage, $1,331,512; Ogle, $1,304,466; Fulton, $1,164,940; Henry, $1,154,830; Will, $1,141,391; Sangamon, $1,135,456; Livingston, $1,122,128; Knox, $1,105,972; Vermilion, $1,086,910; Lee, $1,083,629; Boone, $1,082,936; Stephenson, $1,077,350; Winnebago, $1,039,060; Lake, $1,032,265; Iroquois, $964,985; Whiteside, $942,405; Hancock, $911,339; JoDaviess, $875,140; Mercer, $853,572; Champaign, $843.940; Warren, $807,529; Carroll, $803,119; Peoria, $799.703; Adams, $792,808; Logan, $740,165; Macoupin, $735,131; Christian, $732,029; McDonough, $722,719; Tazewell, $701,668; Shelby, $698,992; Pike, $671,789; Macon, $662,010; Edgar, $652,105; Stark, $638,411; Morgan, $594,256; Coles, $591,699; Marshall, $568,679; Rock Island, $542,026; Kendall, $530,464; Montgomery, $527,547; Madison, $483,773; Greene, $481,828; Schuyler, $480,626; Woodford, $476,099; Grundy, $464,462; Kankakee, $444,040; DeWitt, $429,984; Henderson, $422,730; Piatt, $405,604; St. Clair, $394,341; Fayette, $359,485; Menard, $346,459; Ford, $324,506; Cass, $318,547; Brown, $305,553; Douglas, $295,143; Wayne, $293,028; White, $291,312; Randolph, $288,846; Jersey, $282,207; Clark, $278,725; Jasper, $253,749; Moultrie, $252,579; Jefferson, $251,752; Crawford, $248,387; Hamilton, $238,491; Putnam, $236,596; Scott, $232,416; Marion, $220,475; Effingham, $215,895; Williamson, $219,520; Saline, $206,882; Washington, $205,432; Clay, $204,415; Edwards, $195,877; Lawrence, $186,367; Mason, $183,206; Cumberland, $181,782; Bond, $179,462; Jackson, $158,983; Union, $154,407; Clinton, $150,485; Pope, $149,598; Franklin, $142,538; Monroe, $130,564; Johnson, $128,362; Richland, $123.973; Gallatin, $106,409; Wabash, $101,210; Calhoun, $93,211; Perry, $89,824; Massac, $88,293; Hardin, $79,125; Pulaski, $66,458; Alexander, $37,719.

The difference in the area of the various counties makes it necessary, in order to determine with any degree of accuracy the extent of the sale of animal products in each county by comparison, to arrange the counties according to the amount of sales per acre.

The value per acre of the animal products produced in the counties in the State in 1883, entitles the counties to precedence as follows:

Kane, $8.40; DuPage, $6.46; Boone, $6.08; McHenry, $5.85; DeKalb, $4.74; Lake, $3.63; Stark, $3.52; Winnebago, $3.22; Cook, $3.12; Stephenson, $3.01; Ogle, $2.72; Carroll, $2.62; Kendall, $2.56; Bureau, $2.51; Knox, $2.47; Mercer, $2.45; LaSalle, $2.41; Warren, $2.38; JoDaviess and Lee, $2.32; Marshall and McLean, $2.29; Henry, $2.24; Putnam, $2.23; Whiteside, $2.18; Will, $2.17; Fulton, $2.12; Peoria, $2.07; Sangamon, $2.06; Rock Island, $2.03; McDonough, $1.98; Vermilion, $1.92; Logan, $1.88; Coles, $1.84; Macon, $1.80; Henderson, $1.77; Hancock, $1.74; Grundy and Menard, $1.73; Schuyler, $1.72; DeWitt, Livingston and Tazewell, $1.71; Christian and Edgar, $1.63; Morgan, $1.62; Brown, $1.62; Adams, $1.50; Scott, $1.46; Shelby, $1.44; Piatt and Woodford, $1.41; Greene, $1.40; Edwards, $1.39; Iroquois, $1.37; Macoupin, $1.35; Champaign, $1.33; Cass, $1.32; Pike, $1.30; Jersey, $1.21; Montgomery, $1.19; Moultrie, $1.16; Douglas, $1.11; Madison, $1.08; Kankakee, $1.05; Ford, $1.03; St. Clair, .94; White, .93; Crawford, .90; Hamilton, .87; Clark and Saline, .86; Fayette, .85; Cumberland, Jasper and Williamson, .82; Randolph, .81; Lawrence, .80; Effingham, .76; Clay, Hardin and Jefferson, .72; Bond, .71; Union, .67; Wabash, .66; Wayne, .65; Marion and Pope, .64; Johnson, .61; Washington, .60; Massac and Pulaski, .59; Franklin, .55; Monroe, .55; Richland, .54; Gallatin, .53; Calhoun and Mason, .51; Clinton, .49; Jackson, .48; Perry, .36; Alexander, .33.

CORN.

The area of the 1884 corn crop of the State of 6,898,819 acres is less than that of any year since 1873. The average yield of corn per acre the past season of 33 bushels has not been exceeded but twice during the past twelve years, viz: 1885, 34 bushels, and 1879, 38 bushels. The aggregate yield of corn the past season was 207,556,622 bushels, and exceeds that of the three preceding years. The average farm price of corn of 29 cents per bushel obtained for the late crop is lower than that of any preceding year since 1860, excepting 1861 (24), 1872 (24), 1877 (28), and 1878 (22). The following table shows the late crop of corn to be worth $60,300,153.00. During the past twenty years the value of the corn crop of the State has not been as low but five seasons, viz: 1865, 1868, 1872, 1873 and 1878.

ACRES, YIELD AND VALUE.

Year.	Number of acres ...	Average yield per acre—bushels....	Bushels produced..	Price per bushel—cents	Total value..........	Value per acre.....	*Cost of production per acre.........	Total cost of production........	Profit	Loss ....
1860	3,839,159	30	115,174,770	42½	$48,944,277	$12 74	$10 50	$40,311,169	$8,633,108	....
1861	3,839,159	30	115,174,770	24	27,641,914	7 00	10 50	40,311,169	....	$12,669,225
1862	3,458,903	40	138,356,120	23	32,821,911	9 49	10 50	36,318,481	....	3,496,570
1863	3,773,349	22	83,013,681	62	51,479,442	13 64	10 50	39,620,164	11,859,278	....
1864	4,192,610	33	138,356,130	75	103,767,101	24 75	10 50	44,022,405	59,744,696	....
1865	5,032,996	35¼	177,095,852	29½	51,800,536	10 31	10 50	52,751,958	....	951,422
1866	4,931,783	31.6	155,844,350	43	67,031,070	13 58	10 50	51,783,721	15,229,349	....
1867	4,583,655	23.8	109,091,000	68	74,281,880	16 20	10 50	48,128,377	26,153,503	....
1868	3,928,742	34.2	134,363,000	43	57,786,090	14 70	10 50	41,251,791	16,521,299	....
1869	5,237,068	23.2	121,500,000	57	69,255,000	13 22	10 50	54,989,214	14,265,786	....
1870	5,720,965	35.2	202,378,000	35	70,482,300	12 32	10 50	60,070,132	10,412,168	....
1871	5,310,469	38.3	203,391,000	32	65,085,120	12 25	10 50	55,759,921	9,325,196	....
1872	5,468,040	39.8	217,628,000	24	52,230,720	9 53	10 50	57,474,420	....	5,183,700
1873	6,839,714	21	143,684,000	32	45,962,880	6 72	10 50	71,816,997	....	25,854,117
1874	7,421,055	18	133,579,000	56	74,804,240	10 08	10 50	77,921,077	....	3,116,837
1875	8,163,265	34.3	280,000,000	34	95,200,000	11 66	10 50	85,714,282	9,485,718	....
1876	8,920,009	25	223,000,000	31	69,130,000	7 75	10 50	93,660,000	....	24,530,000
1877	8,935,411	30	269,889,742	28	77,562,879	8 68	10 50	93,821,815	....	16,258,936
1878	8,672,088	29	250,560,810	22	56,035,842	6 46	10 50	91,056,924	....	35,021,082
1879	7,918,881	38	305,913,377	32	97,483,052	12 16	10 50	83,148,250	14,334,802	....
1880	7,574,545	33	250,697,036	33	83,757,089	11 56	10 50	79,411,857	4,345,182	....
1881	7,157,334	24	174,491,706	53	93,328,977	12 72	10 52	75,303,074	18,025,903	....
1882	7,371,950	24	179,471,729	42	76,528,755	10 08	10 55	77,802,326	....	1,273,571
1883	7,304,596	25	186,583,558	36	68,067,698	9 00	10 50	76,689,138	....	8,621,440
1884	6,898,819	33	207,556,662	29	60,300,153	8 74	10 45	72,080,712	....	11,780,559

* Estimated at same as reported for 1860.

CONDITION OF CORN.

The condition of corn during the growing season, the average yield per acre, and the average monthly rainfall for said months, for a term of years, is given in the following table:

Year.	May.	June.	July.	August.	Average condition for season.	Average monthly rain-fall—inches.	Average yield p'r acre—bushels.
1877	....	83	82	76	80	....	30
1878	....	77	84	83	81	3.03	29
1879	....	87	101	103	97	2.76	38
1880	....	100	100	90	97	3.23	33
1881	69	88	87	70	78	3.60	24
1882	103	77	68	65	98	4.11	24
1883	....	80	83	88	84	3.91	26
1884	....	88	68	66	74	3.62	33
Average	....	85	84	80	83	3.48	29

The season was very favorable for maturing the late crop, and the quality of the corn is much above the average.

AVERAGE YIELD OF CORN.

The yield of corn per acre for a term of years is given herewith. The counties in the State are arranged according to the extent of yield per acre, precedence being given to the counties in which the yield has been the largest.

The yield of corn in Scott county the past nine years averages 40 bushels; in Greene, and St. Clair, 38; JoDaviess and Mercer, 37; Putnam, Stark and Stephenson, 36; DeKalb, Kane, Morgan, Sangamon and Warren, 35; DuPage, McHenry and Monroe, 34; Boone, Carroll and Schuyler, 33; Calhoun, Cass, Lake, Logan, Madison and Winnebago, 32; Adams, Cook, Jersey, Knox, Macon, Marshall and Rock Island, 31; Edgar, Henderson, Henry, Lee, Menard, Ogle, Peoria, Piatt, Pike and Will, 30; Alexander, Brown, DeWitt, Fulton, Macoupin, McDonough, McLean, Randolph, Vermilion and Whiteside, 29; Champaign, Kendall, Pulaski, Shelby, Tazewell and Union, 28; Bureau, Christian, Douglas, Gallatin, Hancock, Johnson, LaSalle, Massac and Woodford, 27; Coles, Crawford, Montgomery, Moultrie, Pope, Saline and Wabash, 26; Franklin and Hardin, 25; Clark, Grundy, Iroquois, Kankakee, Washington and White, 24; Ford, Jackson, Livingston and Williamson, 23; Bond, Hamilton and Jefferson, 22; Clinton, Cumberland, Effingham, Lawrence and Wayne, 21; Jasper, 20; Edwards, Marion, Mason and Richland, 19; Fayette and Perry, 18; Clay, 16.

The average yield per acre of corn in the three divisions of the State the past seven years is given in the following table. It will be seen that the largest average is obtained in the northern counties, and that the average yield per acre in the central counties is much larger than in the southern counties for the years named in the table.

Division.	Average yield per acre—bushels.							Averages.
	1878.	1879.	1880.	1881.	1882.	1883.	1884.	
Northern	36	39	37	27	23	22	34	31
Central	27	39	34	28	23	29	31	30
Southern	22	35	24	6	30	28	24	24
Average	28+	38	32+	20+	25	26	29+	28

PRICES OF CORN.

The following table gives the lowest and highest prices No. 2 corn (cash), at Chicago, during each month from 1873 to 1884, inclusive:

Year.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.
1873...............	30 @ 30⅛	30¼ @ 31½	31 @ 35⅞	30⅝ @ 38⅝	37 @ 42¾	27 @ 37	32¼ @ 33½	37⅛ @ 41½	32½ @ 43½	34 @ 39¾	32⅞ @ 47	44½ @ 54¼
1874...............	49 — 61⅜	52 — 58½	53⅝ — 64¼	56½ — 65¼	55 — 65¾	56 — 65⅝	58¾ — 80	62½ — 68	66½ — 86	69 — 80⅞	71¼ — 85½	71⅜ — 85
1875...............	64 — 70	61⅜ — 65¼	63¼ — 69½	68 — 76½	60 — 76⅛	62¾ — 71	67 — 76½	64½ — 73¼	54¾ — 62	51¼ — 59¾	49 — 53½	45½ — 53½
1876...............	40¼ — 45	38⅝ — 43	41¾ — 47½	45 — 48¾	44⅛ — 49	43¾ — 47⅜	42¾ — 48	41¾ — 47	43 — 47¾	42 — 46⅞	41⅝ — 46	43¼ — 46⅝
1877...............	41⅝ — 44⅜	39¼ — 42¾	37⅝ — 41¾	38½ — 58½	43¼ — 57½	33⅛ — 47¾	46⅜ — 50½	41 — 48¼	41½ — 46¼	41¾ — 45⅞	43¾ — 50	43¼ — 45⅞
1878...............	38⅞ — 43½	38 — 43⅛	41 — 43½	37 — 42⅝	34¾ — 41⅛	35¼ — 37½	35⅞ — 40¾	36¾ — 39¾	34¾ — 37½	33¼ — 35	30¾ — 34	29⅞ — 31⅝
1879...............	29⅜ — 31⅛	30⅞ — 33¾	31½ — 33½	30¾ — 34	33¼ — 36⅜	35¼ — 36⅞	34⅛ — 37⅜	31⅞ — 34½	32½ — 38½	36 — 48	39 — 42⅞	39 — 43¼
1880...............	36¼ — 40⅝	35¼ — 37⅞	32⅛ — 56⅝	31½ — 37¼	36¼ — 38⅜	33¾ — 37⅛	33⅞ — 37¾	35½ — 41⅜	39⅛ — 41	38¾ — 40⅜	39¼ — 44⅛	35½ — 42¼
1881...............	36 — 37¾	36 — 37⅞	37⅝ — 39¼	38⅛ — 44	41½ — 45	41½ — 48	45 — 50½	48⅞ — 64¾	60¼ — 73½	59⅝ — 76⅜	56¼ — 63½	58⅜ — 63½
1882...............	60⅛ — 62⅜	54 — 60⅞	57¾ — 66¼	66¼ — 77⅝	68¾ — 77¼	68⅜ — 75½	74⅝ — 82⅝	74½ — 79⅝	57½ — 74⅞	59 — 72¾	64 — 72	48⅜ — 59½
1883...............	49⅛ — 61	54¾ — 59⅛	50¼ — 58¾	47⅛ — 55⅜	52¾ — 56⅝	50¼ — 57¼	47⅛ — 53	49⅛ — 53½	47 — 52½	46 — 49¾	40⅝ — 57	54 — 63
1884...............	51 — 57¾	52 — 55	49½ — 54⅝	44¼ — 56	52½ — 57	54¼ — 56½	49¼ — 56⅜	50¼ — 55¾	51¾ — 87	41¼ — 59¼	35⅛ — 45	34½ — 40¼

RANGE OF PRICES.

The table on page 274 of this report gives the range of prices for No. 2 corn at Chicago, each month, during the past eleven years.

The highest and lowest prices obtained for No. 2 corn at Chicago each year since, and including 1873, are given in the following table:

Year.	Lowest.		Highest.	
	Month.	Price.	Month.	Price.
1873	January	30 @30⅛	December	44½@54
1874	February	52 —58½	November	71¼—85½
1875	December	45½—53½	April	68 —76½
1876	February	38⅝—43	May	44⅛—49
1877	March	37⅝—41¾	April	33½—58½
1878	December	29⅞—31⅝	March	41 —43½
1879	January	29⅛—31⅛	October	36 —48
1880	March	32⅛—36⅝	November	39¼—44⅛
1881	January	36 —37⅝	October	59⅝—76⅜
1882	December	48⅜—59½	July	74⅝—82⅝
1883	October	45 —49¾	December	54 —63
1884	December	34½—40¼	May	52½—57

CORN CROP OF THE UNITED STATES.

The following table gives the area, yield and value of the last fourteen corn crops of the United States, as well as the amount exported.

Year.	Acreage	Yield per acre, bushels	Total product, bushels	Price per bushel.	Total value of product	Corn and corn meal exported in fiscal year ending June 30, bushels	Per cent. exp'rd	Per cent. home consumption.
1871	34,091,137	29.1	991,898,000	$0 48.2	$478,295,900	35,727,010	3.6	96.4
1872	35,526,836	30.7	1,092,719,000	39.8	435,149,290	40,154,274	3.6	96.4
1873	39,197,148	23.8	932,274,000	48	447,183,020	35,985,834	3.8	96.2
1874	41,036,918	20.7	850,148,500	64.7	550,043,080	30,025,026	3.5	96.5
1875	44,841,371	29.4	1,321,069,000	42.	555,445,930	50,910,532	8 8	91.2
1876	49,033,364	26.1	1,283,827,000	37.	475,491,210	72,652,611	5.6	94.4
1877	50,369,113	26.6	1,342,558,000	35.8	480,643,400	87,192,110	6.5	93.5
1878	51,585,000	26.9	1,388,218,750	31 8	441.153,405	87,884,892	6.3	93.7
1879	53,085,450	29.2	1,547,901,790	37.5	580,486,217	89,572,329	5.8	94.2
1880	52,655,231	29,2	1,538,535,000	40.1	617,485,100	99,572,329	6.4	93.6
1881	64,000,000	18.6	1,194,000,000	63.4	757,000,000	93,648,147	7.8	92.2
1882	66,500,000	24 4	1,624,917,800	*54.	878,455.612	44,340,683	2.7	97.3
1883	68,301,889	22.7	1,551,066,825	*52.	806,554,754	40,586,825	2 6	97.4
1884	69,683,780	25.8	1.795.528,432	35.7	640,730,859	46.158,606	2.6	97.4

* Estimated.

The 1884 corn crop of the United States is the largest on record. The yield per acre the past season was not quite up to the average for the period covered by the foregoing table.

The corn area the past season exceeds that of any former year.

EXPORTATION OF CORN.

The table on next page gives the amount and value of corn exported from the United States to the various nations for the years ending June 30, 1883 and 1884.

The exportation of corn exceeds that of the two preceding years.

DISTRIBUTION OF CORN EXPORTED.

The extent and distribution to foreign countries of corn exported from the United States for the years ending June 30, 1883 and 1884, is as follows:

Corn-meal has been reduced to bushels, allowing four bushels of corn to one barrel of meal.

Nations.	1883.		1884.	
	Bushels.	Value.	Bushels.	Value.
Belgium	427,355	$302,902	546,872	$329,878
Brazil	....	....	46	42
Central American States	34,759	34,589	6,080	4,895
Chili	....	....	20	19
Denmark	719,256	482,972	1,747,450	1,414,890
Danish West Indies	3,064	2,635	84,613	72,665
France	1,617,903	1,077,000	1,351,255	814,602
French West Indies	52,858	45,737	50,424	37,917
French Guiana	101	81	545	443
Miquelon Langley and St. Pierre Islands	4,530	3,972	6,887	4,956
Germany	1,869,271	1,277,526	4,228,667	2,581,938
England	16,990,358	11,635,840	20,785,696	12,959,415
Scotland	3,531,576	2,462,824	3,316,776	2,057,726
Ireland	9,488,737	6,413,669	2,354,427	1,451,532
Nova Scotia, N. Brunswick and Pr. E'wd Island	208,867	150,247	610,218	427,032
Quebec, Ontario, Manitoba and the N. W. T.	2,978,691	1,880,197	6,197,954	3,316,346
British Columbia	1,537	1,540	3,657	3,482
Newfoundland and Labrador	6,902	5,605	21,868	15,954
British West Indies	318,841	187,244	578,051	462,669
British Guiana	39,916	32,564	65,333	50,577
British Honduras	1,532	1,221	942	664
British Poss. in Africa and adjacent Islands	26,059	23,919	312	238
British Possessions in Australasia	1,002	998	12,390	11,633
Hawaiian Islands	7,630	7,438	10,661	10,208
Hayti	3,402	2,824	2,320	1,856
Italy	12,509	8,300	30,970	18,600
Liberia	....	....	76	66
Mexico	476,453	391,751	2,002,452	1,411,473
Netherlands	600,675	414,407	1,116,443	733,905
Dutch West Indies	39,922	30,966	96,198	80,923
Dutch Guiana	....	....	250	202
Peru	....	....	4	5
Portugal	441,708	304,467	180,669	117,744
Azore, Maderia and Cape Verde Islands	86,717	62,114	29,740	20,855
Russia on the Baltic and White Seas	....	....	845,411	206,213
Russia, Asiatic	....	....	178	175
San Domingo	....	....	1,383	1,188
Spain	266,103	178,089	105,197	62,766
Cuba	257,691	207,843	182,610	122,105
Porto Rico	1,100	981	8,786	6,700
Spanish Poss. in Africa and adjacent Islands.	24,007	17,698	200	133
Sweden and Norway	81,319	52,884	24,334	15,728
Turkey in Africa	1,200	1,080	....	....
United States of Columbia	43,074	36,416	48,691	36,305
Venezuela	15,828	13,341	1,540	1,190
All other countries and ports in S. A., n. e. s.	3,272	3,500	....	....
Total	40,586,825	$27,756,082	46,158,606	$28,466,783

SORGHUM.

The area of this crop was less than that of the previous year, but the larger average yield per acre in gallons of syrup makes the total number of gallons produced the largest on record.

The value of sorghum syrup produced the past season exceeds that of the preceding seven years, as shown in the following table:

Year.	Acreage.	Av. yield per acre gal.	Total number of gallons.	Value per gallon.	Value of crop.
1877	19,335	63	1,227,164	$0 42	$515,409
1878	14,638	80	1,174,549	45	528,547
1879	17,883	73	1,309,400	38	497,572
1880	9,825	65	636,216	42	267,211
1881	8,263	55	456,714	55	251,193
1882	13,757	61	816,892	50	408,446
1883	14,023	90	1,272,287	50	604,157
1884	13,854	100	1,389,248	45	631,270

BROOM CORN.

The area devoted to this crop the past season is much less than that of the preceding two years.

The yield per acre of broom corn the past season was nearly up to the average of the past eight years.

The price per ton paid for the crop is less than that received during the preceding five years.

The following table gives the area, yield and value of the last eight crops of broom corn in this State.

Year.	Acreage.	Av. yield per acre.	Total yield—pounds.	Value per ton.	Value of crop.
1877	14,566	458	6,674,747	$71 20	$237,594
1878	18,248	614	11,218,168	49 50	277,645
1879	17,664	632	11,161,238	86 75	484,195
1880	18,652	775	14,457,156	77 40	559,447
1881	17,887	1,437	25,708,250	128 50	1,651,739
1882	43,036	225	9,693,187	80 00	387,680
1883	33,922	1,000	33,922,000	90 00	1,481,710
1884	25,173	750	16,228,000	72 00	585,572

WHEAT.

The area and yield of wheat the past season is much larger than that of the previous year. The late crop of wheat of 34,367,493 bushels has been exceeded in amount but three times—in 1882, 52,323,261 bushels; 1880, 56,508,309 bushels; 1879, 45,417,661 bushels.

The price received for wheat the past season by the producers, 76 cents per bushel has not been lower during the past twenty-four years, with the exception of 1861, when wheat averaged but 71 cents per bushel.

The wheat crop of 1884 was much below the average in quality, especially in the Southern counties.

The following table gives the area, yield and value of the wheat crop of the State during the past twenty-five years:

WHEAT—(Spring and Winter.)

Year.	Number of acres...	Average yield per acre—bushels...	Bushels produced	Price per bushel..	Total value.......	Value per acre....	Cost per acre of production.....	Total cost of production.........	Profit...........	Loss............
1860......	2,109,471	11.3	23,837,023	$0 85	$20,261,469	$9 60	$10 55	$22,254,919	....	$1,993,450
1861......	2,109,471	11.3	23,837,023	71	16,924,284	8 02	10 55	22,254,919	....	5,330,635
1862......	2,300,964	14	32,128,500	76	24,483,262	10 64	10 55	24,275,170	$207,092	....
1863.....	2,617,347	12	31,408,163	1 05	32,978,571	12 59	10 55	27,613,011	5,365,560	....
1864......	2,328,763	14.3	33,371,173	1 55	51,725,318	22 21	10 55	24,568,450	27,156,868	....
1865......	2,296,977	11	25,266,745	1 09	27,541,732	12 00	10 55	24,233,107	3,308,625	....
1866......	2,196,263	13	28,551,421	1 93	55,104,243	25 09	10 55	23,170,575	31,933,668	....
1867......	2,456,140	11.4	28,060,000	1 97	55,160,000	22 45	10 55	25,912,277	29,247,723	....
1868......	2,483,478	11.5	28,560,000	1 20	34,272,000	13 80	10 55	26,200,692	8,071,308	....
1869......	2,607,142	11.2	28,200,000	76	22,192,000	8 51	10 55	27,505,348	....	5,313,348
1870......	2,259,538	12	27,115,000	94	25,488,100	11 28	10 55	23,838,600	1,649,500	....
1871......	2,050,081	12.3	25,216,000	1 18	29,754,880	14 51	10 55	21,628,354	8,126,526	....
1872......	2,042,231	12.1	24,711,000	1 23	30,394,530	14 88	10 55	21,545,537	8,848,993	....
1873......	2,104,962	13.5	28,417,000	1 10	31,258,700	14 84	10 55	22,207,360	9,051,340	....
1874......	2,619,304	11.5	30,122,000	86	25,904,920	9 88	10 55	27,633,657	....	1,728,737
1875	2,600,000	10.5	27,300,000	91	24,833,000	9 55	10 55	27,430,000	....	2,587,000
1876......	2,520,430	9.3	23,440,000	93	21,799,200	8 64	10 55	26,590,536	....	4,791,336
1877......	1,977,745	16.4	32,490,556	1 15	38,002,082	19 22	10 55	20,865,210	17,136,872	....
1878......	2,324,755	14.6	33,883,398	80	27,059,460	11 64	10 55	24,526,165	2,533,295	....
1879......	2,440,808	18¾	45,418,661	87	39,930,639	16 36	10 55	25,740,535	14,180,104	....
1880......	3,256,350	17⅓	56,508,309	82	46,497,160	14 27	10 55	24,854,550	11,642,610	....
1881......	3,642,589	7⅓	22,374,163	1 07	24,133,780	7 90	10 55	32,499,238	....	8,365,458
1882......	2,846,117	18⅓	52,323,261	89	46,714,376	16 41	10 70	30,477,274	16,237,102	....
1883......	2,047,956	10	20,347,592	95	19,337,063	9 50	11 10	22,695,812	....	3,358,749
1884......	2,773,658	12	34,367,493	76	26,007,205	9 38	10 75	29,904,594	....	8,897,389

ILLINOIS WHEAT FOR EXPORT.

The following table gives the amount of wheat produced, consumed, and the surplus, for shipment from the State, during the past twenty-five years.

The surplus wheat produced in this State during the period named in excess of the amount required for seed and consumption amounts to 425,443,325 bushels, valued at $440,828,418.00.

The increase in the population of the State from year to year was determined by adding the average per cent. of increase for the last decade as shown by the census returns.

WHEAT—(Spring and Winter.)

Year.	Total acreage......	Bushels Wheat produced	Population..........	Amount required for seed, 1½ bushels per acre	Wheat for consumption—4 bushels per capita per annum .	Surplus Wheat for export......	Value surplus Wheat
1860	2,109,471	23,837,023	1,711,951	2,812,628	6,847,804	14,176,591	$12,050,102
1861	2,190,471	23,837,023	1,780,844	2,812,628	7,123,376	13,901,019	9,869,723
1862	2,360,964	32,218,500	1,852,508	3,067,952	7,410,032	21,740,516	16,522,792
1863	2,617,347	31,408,163	1,927,054	3,489,796	7,708,216	20,210,151	21,220,658
1864	2,328,763	33,371,173	2,004,598	3,105,017	8,018,392	23,247,764	34,484.034
1865	2,266,977	26,266,745	2,085,261	3,062,636	8,341,044	13,863,065	15,110,740
1866	2.196,263	28,551.421	2,169,168	2,928.350	8.676,672	16,946,399	32,706,550
1867	2,456,140	28,060,000	2,226,450	3,274,853	9.025,800	15,759,347	31,045,913
1868	2,483.478	28,560,000	2,347,242	3.311,304	9,388,958	15,859,728	19,031,674
1869	2,607,142	28,200,000	2,441.686	3,476,189	9,766,744	14,957,067	11,367,371
1870	2,259,583	27,115,000	2,539,891	3,012,777	10,169,564	13,942,659	13,106,099
1871	2,050,081	25,216,000	2,589,105	2,733,441	10,356,420	12,126,139	14,308,844
1872	2,042,231	24,711,000	2,639,304	2,722,974	10,557,216	11,430,810	14,059,896
1873	2,104,963	28,417,000	2,690.507	2,806,617	10,762,028	14,848,355	16,333,190
1874	2,619,304	30,122,000	2,742,734	3,492,405	10,970,936	15,658,659	13,466,446
1875	2,600,000	27,300,000	2,796,005	3,466,666	11,184,020	12,649,314	11,510,876
1876	2,520,430	23,440,000	2,850,340	3,360,573	11,401,360	8,678,067	8,070,602
1877	1,977,745	32,490,556	2,905,762	2,636,993	11,623,048	18,230,515	20,965,092
1878	2,324,755	33,883,398	3,962,293	3,099,673	11,849,172	18,934,553	15,147.642
1879	2,440,809	45,417,661	3,019.954	3,254,412	12,079,816	30,083,433	26,172,587
1880	3,256,350	56,508,309	3,078,669	4,341,800	12,314,676	39,851.833	32,678,503
1881	3,642,589	21,374,163	3,137,991	4,056,785	12,551,964	5,765,414	6,168,993
1882	2,846,117	52,323,261	3,197,906	3,794,584	12,791,624	35,757,053	32,230,568
1883	2,047,956	20,347,592	3,259,458	2,730,608	13,037,832	4,579,152	4,350,194
1884	2,773,658	34,367,493	3,321,010	3,698,211	13,284,040	17,385,242	13,199,523

ACREAGE AND CONDITION OF GROWING CROP OF WHEAT.

The reported area seeded to winter wheat the past fall was 2,317,291 acres, or 405,472 acres less than last season.

WAEAT CROP OF THE UNITED STATES.

The following table shows the acreage, yield and value of the wheat crop of the United States and export of wheat therefrom during the past fourteen years (each ending June 30,) and the per cent of exports and amount retained for seed and consumption:

Year.	Acreage	Yield per acre, bushels.....	Total product, bushels.....	Price per bush.	Total value of product.....	Wheat & flour exported in fiscal year closing June 30, following, bushels.....	Per cent. exp'd	Per cent. home consumption
1871.........................	19,943,893	11.5	230,722,400	$1 25.8	$290,411,820	38,995,755	16.9	83.1
1872.........................	20,858,359	11.9	249,997,100	1 24	310,180,375	52,014,715	20.8	79.2
1873.........................	22,171,676	12.7	281,580,285	1 15	323,817,322	91,510,398	32.5	67.5
1874.........................	24,967,026	12.3	309,107,200	0 94.1	291,107,805	72,912,817	23.7	76.3
1875.........................	26,381,522	11.0	292,136,000	1 00	294,580,990	74,750,682	25.5	74.5
1876.........................	27,627,021	10.4	289,356,500	1 03.7	300,259,300	57,149,949	19.7	80.3
1877.........................	26,277,546	13.9	364,194,146	1 08.2	394,695,779	92,141,626	25.3	74.7
1878.........................	32,108,560	13.1	420,122,400	0 77.7	326,346,424	150,502,506	35.8	64.2
1879.........................	32,545,899	13.7	448,756,118	1 10.8	497,008,803	180,304,000	40.1	59.9
1880.........................	36,037,950	13.3	480,849,700	0 95.8	460,597,000	183,309,800	37.0	63 0
1881.........................	37,700,000	9.3	350,000,000	1 29.4	453,000,000	190,294,407	54.4	45.7
1882.........................	38,676,100	13.5	502,789,300	*0 94	472,621,742	124,850,232	24.8	75.2
1883.........................	36,393,319	11.5	420,154,500	*1 00	420,154,500	152,414,148	36.7	63.3
1884.........................	39,475,885	13.0	512,763,900	0 64	330,861,254	116,110,302	22.6	77.4

*Estimated.

DISTRIBUTION OF WHEAT EXPORTED.

The following table gives the extent and distribution to foreign countries of wheat exported from the United States the past two years.

In the following table the flour exported has been reduced to bushels, at the rate of five bushels to the barrel, and is included in the total exports.

Nations.	1883.		1884.	
	Wheat and Flour in bushels	Value,	Wheat and Flour in bushels	Value.
Argentine Republic	11,920	$14,100	5	$5
Belgium	10,889.909	12,440,334	7,509,809	8,043,010
Brazil	3,744,615	4,578,170	3,245,085	3,845,224
Central American States	517,616	580,010	563,458	599,977
Chili			200	224
China	28,870	33,775	41,490	48,491
Denmark	409,401	470,784	270,534	288,912
Danish West Indies	151,535	171,159	141,365	152,544
France	15,412,827	17,534,158	8,445,135	9,247,331
French West Indies	497,077	577,260	465,183	505,676
French Guiana	10,425	12,722	10,780	11,718
Miquilon, Langley and St. Pierre Islands	104,685	116,802	97,805	96,800
French Poss. in Africa and adjacent Islands	9,376	11,731	3,430	4,350
French Possessions, all other	46,574	50,077	55,098	54,886
Germany	1,574,224	1,800,367	1,056,406	1,070,657
England	50,046,417	58,393,718	36.100,588	39,789,104
Scotland	12,429,456	15.912,626	12,694.061	14,363.521
Ireland	31,378,075	34,004,782	23,886,256	24,789.002
Gibraltar	174,496	189,384	23,035	23,052
Nova Scotia, New Brunswick and Pr. Edw. Isl.	530,218	552,603	566,015	607,860
Quebec, Ontario, Manitoba and the N. W. Ter.	6,371,064	7,262.121	6,847,235	7,611,623
British Columbia	241,268	240,596	241,582	231,696
Newfoundland and Labrador	983,360	859,515	977,075	777,123
British West Indies	1,822,202	2,103,170	2,041,594	2,106,571
British Guiana	572,300	564,487	309,895	569,665
British Honduras	99,950	108,954	78,225	83,705
British East Indies	16,045	14,708	250	317
Hong Kong	1,341.796	1,320,472	1,429,180	1,298,060
British Poss. in Africa and adjacent islands	394.180	429,752	35,165	45,728
British Possessions in Australasia	73.560	64,801	1,805	1,896
Hawaiian Islands	174,710	189,206	192,800	196,797
Hayti	481.615	547,770	364,410	403,208
Italy	79,780	90,112	105,366	113,760
Japan	66,485	69,715	50,922	55,102
Liberia	10,500	14,765	7,385	9,799
Mexico	108,949	178,408	108,394	174,067
Netherlands	3,141,356	3,522,752	1,752,074	1,814.138
Dutch West Indies	109,900	124,528	121,185	131,911
Dutch Guiana	63,635	76,039	59,460	66,292
Dutch East Indies			500	528
Peru	45	63	1,455	1,545
Portugal	3,508,695	4,076,444	3,377,617	3,725,084
Azore, Madeaia and Cape Verde Islands	305,292	328,858	199,244	212,761
Portuguese Poss. in Africa and adjacent Isl'ds			1,000	1,400
Rusia, Asiatic	25,245	28,117	40,460	40,873
San Domingo	125,100	155,763	153,205	177,414
Spain	1,723,409	1,950,992	65,230	68,780
Cuba	1,235.898	1,375,610	765,671	839,793
Porto Rico	380,637	432.121	380,335	410,618
Spanish Poss. in Africa and adjacent islands	27,380	30,446	5,890	5,819
Spanish Possessions, all other	7,200	8,000	10.260	10,587
Sweden and Norway	94,502	106,680	34,054	33,484
Turkey in Europe			125	111
United States of Columbia	257,150	306,740	322,192	364,145
Uruguay	48.020	61,184	17,810	19,908
Venezuela	533,025	592,230	518,522	520,134
All other countries and ports in S. A., n, e. s.	650	656	2,230	2,478
All other countries and ports in Asia, n. e. s.			40	58
All other countries and ports in Africa, n, e. s.	10,411	10,579		
All other islands and ports, n. e. s	2,310	2,800	4,822	5.038
Total	152,414.148	$174,703,800	116,110,302	$126,166,374

It will be seen in the foregoing table that the 1884 crop of wheat is the largest produced in the United States, and that the exports are less than during the past seven years.

BUCKWHEAT.

The following table gives the area, yield and value of the last eight crops of buckwheat produced in this State:

Year.	Acreage.	Av. yield per acre.	Bushels produced.	Value per bush.	Value of crop.
1877	15,880	13	207,696	$0 73	$151,612
1878	16,060	9	155,340	1 33	206,608
1879	10,786	10	112,180	77	85,257
1880	6,681	9	62,128	77	47,838
1881	3,648	4½	16,374	1 12	18,329
1882	2,469	25	63,743	77	49,082
1883	3,491	14	49,397	85	41,800
1884	3,526	17	58,641	64	37,864

The area and yield of buckwheat was some larger in 1884 than in 1883. The price per bushel obtained for the late crop is less than that of any year on record.

WINTER RYE.

There is a decrease in the area of rye as compared with the previous seeding. The present area of 229,252 acres of rye is 11 per cent. less than the area of the crop harvested in 1884.

HUNGARIAN AND MILLET.

The following table gives the extent and value of the last eight crops of Hungarian and Millet:

Year.	Bushels produced.	Value per bushel.	Total value.
1877	17,463	$0 65	$10,701
1878	26,787	55	14,733
1879	43,776	75	32,832
1880	66,889	70	46,752
1881	76,189	95	72,370
1882	77,423	69	53,422
1883	70,007	62	43,291
1884	33,513	51	17,187

TIMOTHY SEED.

The following table gives the extent and value of the 1884 crop of timothy seed and that of the preceding seven years.

Year.	Bushels produced.	Value per bushel.	Total value.
1877	483,571	$1 25	$604,464
1878	261,559	1 25	326,949
1879	213,329	2 25	479,990
1880	400,124	2 20	880,272
1881	426,531	2 60	1,108,980
1882	320,653	1 68	538,697
1883	358,895	1 35	476,447
1884	389,056	1 30	512,438

CLOVER SEED.

The following table gives the extent and value of the last eight crops of clover seed produced in this State:

Year.	Bushels produced.	Value per bushel.	Total value.
1877	64,686	$4 80	$310,493
1878	77,388	4 05	313,421
1879	138,191	5 00	690,955
1880	87,144	4 60	400,862
1881	125,042	5 20	650,218
1882	55,862	5 00	279,310
1883	78,656	4 75	375,066
1884	138,920	4 40	609,945

BEANS.

The following table gives the area, yield and value per acre of this crop for the past eight years:

Year.	Acreage.	Av. yield per acre.	Yield in bushels.	Value per bushel	Value of crop.
1877	1,545	13	19,955	$1 50	$29,916
1878	1,669	16	18,627	1 35	25,146
1879	2,674	14	36,217	1 50	54,325
1880	1,398	11	15,894	1 60	25,430
1881	1,012	3	3,267	3 30	10,781
1882	983	9	9,776	2 22	21,708
1883	1,091	14	15,738	2 00	31,874
1884	1,621	13	21,335	1 55	33,017

CASTOR BEANS.

The following table gives the area, yield and value of the last eight crops of castor beans produced in this State:

Year.	Acreage.	Av. yield per acre in bu	Yield in bushels.	Value per bushel	Value of crop.
1877	4,503	3¼	17,538	$1 10	$19,512
1878	361	7	2,526	1 25	3,157
1879	3,085	8 1-5	24,314	1 00	24,344
1880	500	6 4-5	3,480	1 05	3,654
1881	758	5¼	4,005	1 65	6,608
1882	2,098	2½	4,346	1 26	5,476
1883	433	8	3,464	1 35	4,668
1884	1,108	17	19,295	1 60	30,794

TOBACCO.

The following table gives the area, yield and value of the tobacco crop of the State during the past eight years:

Year.	Acreage.	Av. yield per acre	Pounds produced.	Value per pound.	Value of crop.
1877	12,320	640	7,885,586	$0 08	$630,847
1878	3,833	584	2,268,492	07	158,794
1879	3,079	890	2,741,329	09	246,719
1880	4,091	668	2,736,407	08	218,912
1881	3,854	453	1,747,474	08	139,798
1882	3,798	622	2,345,931	07	164,215
1883	3,092	710	2,195,426	06	140,920
1884	4,842	767	3,716,408	09	321,582

IRISH POTATOES.

The area devoted to Irish potatoes in this State the past season, of 125,893 acres, has been exceeded but four times, viz: 1872, 128,906 acres; 1873, 137,750 acres; 1874, 135,236 acres; and 1876, 126,000 acres.

The 1884 crop of Irish potatoes, of 11,806,082 bushels, is the largest ever produced in the State, except the crop of 1875. of 15,200,000 bushels, and the crop of 1883, of 14,483,006 bushels.

The price obtained for the late crop, of 35 cents per bushel, is much below the average, and during the past twenty-five years the price has not been lower but three times, viz: 1860, 31 cents per bushel; in 1861, 29 cents per bushel; in 1875, 32 cents per bushel.

The following table gives the area, yield and value of the potato crops of the State since 1880:

Year.	Number of acres....	Average yield per acre—bushels......	Bushels produced....	Price per bushel....	Total value...........	Value per acre.......	Cost per acre of production............	Total cost of production..................	Profit.................	Loss................
1860......	69,255	80	5,540,390	$0 31	$1,717,520	$24 80	$20 55	$1,423,190	$294,330	......
1861......	69,255	80	5,540,390	20	1,606,713	23 19	20 55	1,423,190	183,523	......
1862......	64,444	100	6,444,400	40	2,577,762	40 00	20 55	1,324,324	1,253,438	......
1863......	73,650	70	5,155,523	74	3,815,087	51 80	20 55	1,513,507	2,301,580	......
1864......	55,521	81½	4,511,083	1 15	5,187,745	93 43	30 55	1,140,956	4,036,789	......
1865......	50,124	117	5,864,408	47¼	2,770,933	55 27	20 55	1,030,048	1,740,885	......
1866......	55,983	86½	5,102,035	64	3,265,302	55 36	20 55	1,212,100	2,053,202	......
1867......	60,710	60½	3,673,000	1 20	4,407,600	72 60	20 55	1,247,590	3,160,010	......
1868......	53,521	71	3,800,000	81	3,078,000	57 51	20 55	1,099,856	1,978,144	......
1869......	72,815	103	7,500,000	41	3,075,000	43 23	20 55	1,496,348	1,578,652	......
1870......	104,037	81	8,427,000	64	5,393,280	51 84	20 55	2,147,960	3,255,320	......
1871......	117,409	61	7,162,000	85	6,087,700	51 94	20 55	2,412,755	3,674,945	......
1872......	123,906	75	9,668,000	46	4,448,280	34 50	20 55	2,649,018	1,798,262	......
1873......	137,750	40	5,510,000	1 12	6,171,200	44 80	20 55	2,830,762	3,340,438	......
1874......	135,236	55	7,438,000	83	6,173,540	45 65	20 55	2,779,100	3,394,440	......
1875......	118,750	128	15,200,000	32	4,864,000	40 96	20 55	2,540,312	2,424,688	......
1876......	126,000	75	9,450,000	61	5,764,500	45 75	20 55	2,589,300	3,175,200	......
1877......	95,717	71	6,795,349	45	3,057,907	32 95	20 55	1,966,984	1,090,923	......
1878......	81,460	63	5,095,477	47	2,394,874	29 61	20 55	1,674,003	720,871	......
1879......	90,351	78	7,125,932	50	3,506,788	39 00	20 55	1,856,713	1,650,075	......
1880......	93,387	69	6,470,811	56	3,689,318	38 64	20 55	1,992,702	1,696,646	......
1881......	85,357	47	4,043,377	1 08	4,393,676	50 76	20 55	1,805,478	2,591,198	......
1882......	106,895	100	10,730,234	58	6,261,307	58 00	21 10	2,255,346	4,005,961	......
1883......	118,766	125	14,483,006	35	5,105,203	43 75	21 10	2,507,842	2,622,892	......
1884......	125,893	94	11,806,082	35	4,093,956	32 52	21 00	2,642,399	1,451,557	......

SWEET POTATOES.

The following table gives the area and value of this crop during the past eight years:

Year.	Acreage.	Av. yield per acre bush.	Crop in bushels.	Value per bushel	Value of crop.
1877..	2,355	63	148,270	$0 85	$126,029
1878..	1,729	67	116,914	85	99,402
1879..	1,423	88	126,169	90	112,552
1880..	3,382	66	224,522	90	202,070
1881..	1,815	63	114,486	1 08	123,645
1882..	2,785	77	216,283	80	173,020
1883..	2,696	82	228,605	75	171,847
1884..	2,681	103	276,304	67	184,077

TURNIPS AND OTHER ROOT CROPS.

The following table gives the acreage and value of turnips and other root crops grown in the State during the past eight years:

Year.	Acreage.	Value per acre.	Value of crop.
1877	7,056	$39 55	$279,136
1878	3,775	40 85	154,140
1879	3,139	230 15	722,444
1880	2,300	45 85	105,414
1881	3,046	147 20	448,389
1882	3,809	245 25	934,291
1883	4,361	205 75	897,303
1884	3,856	....	....

APPLES.

The number of bushels of apples produced in the State for the past eight years, as well as the value thereof, is given in the following table:

Year.	Number of bushels.	Price per bushel.	Value of crop.
1877	5,395,351	$0 80	$4,316,281
1878	4,940,811	65	3,211,527
1879	5,958,690	75	4,469,017
1880	10,342,186	56	5,791,624
1881	2,659,529	1 22	3,244,625
1882	6,557,128	80	5,245,702
1883	6,818,520	75	5,134,042
1884	4,152,925	65	2,687,850

PEACHES.

The extent and value of the last eight crops of peaches of this State are given in the following table:

Year.	Number of bushels.	Price per bushel.	Value of crop.
1877	402,587	$0 92	$370,380
1878	607,292	62	376,521
1879	25,749	1 34	34,503
1880	398,970	80	219,176
1881	96,507	1 55	149,586
1882	319,911	83	265,526
1883	260,923	1 10	286,765
1884	135,329	1 70	227,443

PEARS.

The following table gives the extent and value of the pear crop of the State each year since 1876:

Year.	Number of bushels.	Price per bushel.	Value of Crop.
1877	16,818	$1 35	$22,704
1878	13,510	1 25	16,887
1879	6,134	1 55	9,508
1880	35,714	1 30	46,428
1881	14,135	1 80	25,443
1882	9,964	1 33	13,252
1883	7,128	1 80	12,737
1884	4,418	1 40	6,128

GRAPES.

The following table gives particulars concerning the last eight grape crops of the State:

Year.	Pounds produced.	Value per pound.	Total value.
1877	3,002,748	$0 03	$92,782
1878	1,922,636	03	57,679
1879	3,184,952	03	95,548
1880	7,833,041	03	234,991
1881	1,115,902	04	55,795
1882	1,013,390	04	40,536
1883	695,100	05	36,344
1884	467,014	05	22,500

OTHER FRUITS AND BERRIES.

The following table gives the value of other fruits and berries, not named above, for the past eight years:

Year.	Acreage.	Value per acre.	Value of crop.
1877	4,523	$39 53	$178,800
1878	2,559	55 51	197,581
1879	3,111	59 62	185,488
1880	7,803	29 65	231,417
1881	7,670	26 34	208,086
1882	5,881	47 50	279,360
1883	4,583	58 33	267,313
1884	10,181	....	....

WINE.

The following table gives the number of gallons of wine produced in the State during the past eight years:

Year.	Acreage.	Average yield per acre, gal.	Number of gallons.	Value per gallon.	Total value of wine made.
1877	2,612	61	158,944	$1 20	$191,933
1878	5,178	27	142,964	1 20	171,557
1879	2,899	112	326,323	1 30	424,220
1880	4,340	122	530,990	1 15	610,638
1881	3,663	35	129,839	1 35	175,282
1882	3,235	30	96,282	86	82,802
1883	3,500	21	73,898	1 20	88,518
1884	1,092	21	43,114	1 15	48,605

MILK.

The following table gives the number of gallons and value of milk produced in the State during the past eight years:

Year.	Number of gallons.	Value per gallon.	Total value.
1877	17,124,506	$0 11⅙	$1,912,236
1878	30,567,415	10½	3,209,579
1879	96,659,845	08	7,732,788
1880	38,986,861	09⅙	3,573,796
1881	40,153,488	09½	3,814,581
1882	41,433,620	20	8,286,724
1883	43,006,273	14	5,953,207
1884	50,056,318	13	6,783,071

BUTTER.

The following table gives the quantity and value of the butter marketed in this State during the past eight years:

Year.	Number of pounds.	Value per pound.	Total value.
1877	18,970,227	$0 20	$3,794,045
1878	17,997,652	15	2,699,648
1879	25,028,225	19	4,755,363
1880	24,553,449	20	4,910,690
1881	21,578,414	26	5,610,647
1882	21,658,054	25	5,414,763
1883	22,198,370	25	5,606,737
1884	22,696,333	21	4,749,507

CREAM.

The quantity and value of the cream sold in this State during the past eight years is given in the following table:

Year.	Gallons sold,	Price per gallon.	Total value.
1877	2,744.259	$0 55	$1,509,342
1878	62,707	52	32,608
1879	230,497	49	112.943
1880	601,314	50	300,657
1881	1,380,939	51	704,279
1882	2,188.396	62	1.356,805
1883	2.324,579	57	1,229,826
1884	1,479,183	40	600,219

CHEESE.

The following table gives the amount and value of cheese sold in the State during the past eight years:

Year.	Nunber pounds sold.	Value per pound.	Total value.
1877	4,502,671	$0 12	$540,320
1878	5,139.914	10	513,991
1879	6,618,212	13	860.367
1880	6,187,680	13	803 398
1881	5,837,974	15	875,696
1882	5,252,036	14	735,285
1883	4,931,826	14	672.474
1884	4,795,697	10	488,622

ANNUAL REVIEW

ILLINOIS WEATHER SERVICE

FOR 1884.

The science of meteorology is deservedly receiving more attention each succeeding year, especially at the hands of the more intelligent farmers, who realize the great practical value of information of this character to all engaged in agricultural pursuits.

ANNUAL PRECIPITATION.

An acre of ground contains 6,272,640 square inches. One inch of rainfall on an acre of land will make 6,272,640 cubic inches of water, or 3,630 cubic feet. At the common temperature of from 70° to 75° Fahrenheit, a cubic foot of fresh water weighs very approximately 62¼ pounds avordupois. The weight of one inch rainfall over an acre of land will be 225,967½ pounds, in round numbers 113 tons of 2,000 pounds each. An annual rainfall of 42 inches on one acre of land weighs 4,746 tons, equal to 395 car loads of 12 tons each.

METEOROLOGY.

"It is believed that when they (meteorological reports) become to be properly understood, they cannot fail to be of great practical value, not only to those directly engaged in agricultural pursuits, but to all who are directly or indirectly dependent upon the soil.

"The establishment of the State Weather Service has been favored and urged by many physicians, that they might procure the material for a more rational study of the influence of climatic conditions upon many diseases, which are often confined and restricted to certain localities. All reliable meteorological information is of value in this direction, and it is believed that in the future, when an observer is established in every county in the State, great aid will be rendered to those engaged in the investigation of this important point."—Mendenhall.

OUR CLIMATE AND OUR WHEAT CROP.

J. B. Lawes, who stands pre-eminent as authority on all questions relating to agriculture, says in an article (Our climate and our Wheat Crops), Vol. 16, 173, S. S. Agricultural Society of England, 1880:

"As only about five per cent. of the total wheat-crop is derived from the soil itself, the remainder coming directly or indirectly from the atmosphere; and as the amount of matter accumulated from either source depends mainly on the quantity and the relations to one another of heat and moisture, we can not be surprised that the character of the season exercises such a preponderating influence over the growth of our crops. As yet, however, the connection between meteorological phenomena and the progress of vegetation is not so clearly comprehended as to enable us to estimate with any accuracy the yield of a crop by studying the statistics of the weather during the period of its growth. Experience does, indeed, teach us that we may expect better crops under certain conditions of the weather than under others. But it is only by a careful comparison of the characters of the seasons on the one hand, and of the quantity and quality of the produce on the other, for many years, that we can hope to acquire sufficient knowledge to enable us to assign to the various agencies, the sum of which constitutes the climate of the year, their respective values in the production of the crop. As we have said before (this 'Journal,' Vol. IX, part 1, p. 96): 'Thus it is obvious that different seasons will differ almost infinitely at each succeeding period of their advance, and that, with each variation, the character of development of the plant will also vary, tending to luxuriance, or to maturition, that is, to quantity, or quality, as the case may be. Hence, only a very detailed consideration of climatic statistics, taken together with careful periodic observations in the field, can afford a really clear perception of the connection between the ever-fluctuating characters of season and the equally fluctuating characters of growth and produce. It is, in fact, the distribution of the various elements making up the season, their mutual adaptations, and their adaptation to the stage of growth of the plant, which throughout influence the tendency to produce quantity or quality.' "

SUMMARY of Meteorological Observations for the year 1884, *made to the Department of Agriculture. Hours of Observation:* 7 *A. M.,* 2 *P. M.,* 9 *P. M.*

STATIONS.		BAROMETER.			THERMOMETER.			HUMIDITY	WIND.		RAIN.				
	Elevated above sea level	Highest barometer during month	Lowest	Mean	Highest temperature	Lowest	Mean	Mean	Prevailing	Maximum velocity or force	Total rainfall or melted snow	No. of days on which 0.01 or more rain or melted snow fell	No. days on which cloudiness averaged 8 or more on a scale of ten	Depth of snow, in inches, on ground at close of month	Total snowfall, in inches, during the month
	Feet.	Inch	Inch	Inch	Deg.	Deg.	Deg.	Per cent.	Direction.	M'les	Inch	No.	No.	Inch.	Inch.
NORTHERN DIVISION.															
January, 10 stations	......	32.373	29.377	29.913	43.13	-28.95	12.92	74.00	......	4.	1.00	7.	9	6.40	7.01
February, 9 "	......	30.202	29.254	29 774	43.06	-4.70	23.99	78.00	......	5.	2.36	11.	18	6.00	6.80
March, 9 "	......	30.174	29.086	29.785	65.17	-3.79	32.72	73.80	......	4.	3 41	14.	11	......	4.22
April, 6 "	......	30.076	29.085	29.695	79.91	27.55	46.87	68.83	......	5.	2.77	10.	14	......	......
May, 10 "	......	30.135	29.329	29.722	80.65	39.20	59.55	69.26	......	4.25	3.38	10.	7	......	......
June, 10 "	......	30.041	29.512	29.812	90.83	48.64	68.80	75.05	......	5.	3.83	10.	7	......	......
July, 8 "	......	29.969	29.511	29.721	89.80	50.10	71.08	75.25	......	5.	5.97	11.	5	......	......
August, 9 "	......	30.135	29.459	29.826	90.95	47.79	70.12	72.77	......	4.	3.33	8.	5	......	......
September, 8 "	......	30.233	29 467	29.877	91.07	47.00	68.91	73.72	......	4.	4.59	11.	4	......	......
October, 7 "	......	30.348	29.703	29 966	85.23	25.67	54.73	75.35	......	4.	5.39	9.	6	......	......
November, 7 "	......	30 299	29.264	29 929	65.85	3.51	36.54	76.05	......	4.	2.11	5.	8	.50	.69
December, 7 "	......	30.527	29.269	29.997	54.27	-17.64	23.66	78.59	......	4.	4 26	15.	19	.25	9.02
Average, 1884	......	30.376	29.360	29.835	73.53	19.53	47.49	74.22	......	4.35	3.53	10.	9	3.29	5.55
" 1883	......	30.216	29.191	29.820	72.36	20.36	45.24	73.10	......	5.	3.44	9.	10	......	......
" 1882	......	30.173	29.325	29.739	75.45	24.23	49.47	74.90	......	4.	3.42	10.	9	......	......
" 1881	......	30.080	29.260	29.800	72.00	23.50	49.10	71.90	......	4.	3.78	10.	9	......	......
" 1880	......	30.240	29.230	29.740	74.00	23.00	48.00	76.80	......	5.	3.34	8.	7	......	......
" 1879	......	29.750	28.940	29.560	75.00	18 00	46.00	64.40	......	4.	2.67	7.	7	......	......
" 1878	......	29.570	28.920	29.330	73.00	28.00	49.00	83.50	......	5.	2.61	8.	11	......	......

SUMMARY of Meteorological Observations for the year 1884, *made to the Department of Agriculture. Hours of Observation:* 7 *A. M.,* 2 *P. M.,* 9 *P. M.*

STATIONS.	Elevation above sea level	BAROMETER.			THERMOMETER.			HUMIDITY	WIND.		RAIN.			Depth of snow, in inches, on ground at close of month.....	Total snowfall, in inches, during the month..........
		Highest barometer during month..........	Lowest..........	Mean..........	Highest temperature	Lowest..........	Mean..........	Mean..........	Prevailing..........	Maximum velocity of force	Total rainfall or melted snow	No. of days on which 0.01 or more rain or melted snow fell..........	No. days on which cloudiness averaged 8 or more on a scale of ten		
	Feet.	Inch	Inch	Inch	Deg.	Deg.	Deg.	Per cent.	Direction.	M'les	Inch	No.	No.	Inch	Inch
CENTRAL DIVISION.															
January, 6 stations	......	30.792	29.716	30 214	53.75	26 22	18.86	73.00	....	3.	0.82	8	12	......	9.35
February, 6 "	......	39.605	29.654	30 185	53.52	.93	29 75	75.10	....	4.	3.92	9	19	......	3 08
March, 6 "	......	30.570	29.385	29.886	66 75	1.00	56.98	70 70	....	4.	2 64	10	16	......	7.57
April, 6 "	......	30.346	29 527	30 014	81.33	30.53	51 04	62.90	....	5.	2.33	8	17	......	......
May, 7 "	......	30 403	29.686	30 058	82 22	40.90	60 91	65 00	....	4.5	4.39	9	8	......	......
June, 7 "	......	30 257	29.738	30 060	91 91	51.55	71.11	74.90	....	4.	5.60	12	13	......	......
July, 6 "	......	30.241	29.786	30.002	92.06	59.20	73.48	69.10	....	4.	3.62	12	10	......	......
August, 7 "	......	30 407	29.797	30.106	90.03	48.56	71.63	66.10	....	5.	2.27	6	6	......	......
September, 7 "	......	30.391	29 750	30.119	94 08	49.84	71.33	68 80	....	4.	5.55	9	8	......	......
October, 6 "	......	30.610	29.973	30.208	88.00	29 15	57.74	68 30	....	3.	2.75	6	5	......	......
November, 3 "	......	30 585	29.613	30.179	68.22	13.15	41.64	68.90	....	5.	1.90	6	10	2.02	3.40
December, 4 "	......	30.728	29.452	30.207	61.75	11.45	26.20	76.40	....	6.	4.74	13	15	......	11.54
Average, 1884	......	30.495	29 673	30.108	76.97	23.85	50.84	69.90	....	4.29	3.38	9	11	2.02	9.99
" 1883	......	30.477	29.602	29 635	77.54	24 78	50.30	62.50	....	5.	3 62	9	10	......	......
" 1882	......	30.241	29.431	29.859	77 60	29.10	52.92	70.10	....	4.	4.42	10	10	......	......
" 1881	......	30.070	29 270	29.720	75,80	25.60	51 50	71 10	....	4.	3.79	10	9	......	......
" 1880	......	30.220	29.220	29 800	78 00	27.00	52 00	66.50	....	5.	2.81	8	9	......	......
" 1879	......	30.120	29.350	29 700	78.00	23.00	51.00	65.90	....	4.	2.16	8	10	......	......
" 1878	......	29.890	29.050	29.560	77.00	30.00	52.00	71.20	....	5.	3.05	9	11	......	......

SUMMARY of Meteorological Observations for the year 1884, *made to the Department of Agriculture. Hours of Observation:* 7 *A. M.,* 2 *P. M.,* 9 *P. M.*

STATIONS.	Elevation above sea level	BAROMETER.			THERMOMETER.			HUMIDITY	WIND.		RAIN.			Depth of snow, in inches, on ground at close of month	Total snowfall, in inches, during the month
		Highest barometer during month	Lowest	Mean	Highest temperature	Lowest	Mean	Mean	Prevailing	Maximum velocity or force	Total rainfall or melted snow	No. of days on which 0.01 or more rain or melted snow fell	No. days on which cloudiness averaged 8 or more on a scale of ten		
	Feet.	Inch.	Inch.	Inch.	Deg.	Deg.	Deg.	Per cent.	Direction.	Mil's.	Inch.	No.	No.	Inch.	Inch.
SOUTHERN DIVISION.															
January, 9 stations	......	30.754	29.785	30.272	63.77	-22.44	23.48	76.60	......	4.	1.77	9.	11	......	14 27
February, 9 "	......	30.523	29.497	30.105	64.55	4.28	36.75	75.40	......	5.	5.78	13.	15	1.69	1.82
March, 7 "	......	30.456	29.550	30.073	71.57	9 57	44.98	68.50	......	5.	3.47	12.	13	......	2.85
April, 9 "	......	30.239	29.470	29.986	83.00	33.41	53.31	63.60	......	5.	3.57	9.	14	......	......
May, 10 "	......	30.252	29.736	29.989	84.55	46.80	64.34	69.90	......	4 28	5.04	12.	7	......	......
June, 10 "	......	30.209	29.736	29.985	94.05	53.88	73.35	82.90	......	4.	5.71	13.	10	......	......
July, 9 "	......	30.160	29.802	29.975	95.01	64.29	76.84	80.40	......	4.	3.97	10.	5	......	......
August, 10 "	......	30.281	29.809	30.087	93.70	55.20	73.60	73.90	......	4.	2.21	5.	2	......	......
September, 9 "	......	30.292	29.833	31.092	94.94	51.04	72.83	77.20	......	4.	4.38	8.	6	......	......
October, 8 "	......	30.482	29.966	30.189	90.87	30.06	61.16	75.40	......	4.	1.99	3.	3	......	......
November, 9 "	......	30.605	29.750	30.183	72.17	16.06	43.92	75 50	......	4.	2.13	6.	8	1.00	1.16
December, 9 "	......	30.636	29.574	30.175	62.44	-7.80	31.58	78.60	......	4.	7.39	13.	21	......	6.85
Average, 1884	......	30.407	29.709	30.176	80.88	37.95	54.68	74.60	......	4.19	3.94	9.	7	1.34	5.39
" 1883	......	30.462	29.695	30.129	75.82	30.72	54.15	71.70	......	5.	4.68	9.	9	......	......
" 1882	......	30.431	29.737	30.112	80.01	33.61	56.55	74.80	......	4.	4.48	9.	11	......	......
" 1881	......	30.360	29 720	30.080	80.50	33 90	57.10	72.10	......	4.	3.24	9.	13	......	......
" 1880	......	30.430	29.690	30.150	81.00	30.00	56.00	......	......	5.	3.56	7.	12	......	......
" 1879	......	30 620	29.740	30.190	82.00	29.00	55.00	68.20	......	5.	3.45	7.	11	......	......
" 1878	......	30.010	29.310	29.680	80.00	35.00	57.00	66.70	......	5.	3.43	8.	12	......	......

Distribution and amount of precipitation for January, 1884, *reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.*

STATIONS.		RAINFALL OR MELTED SNOW, IN INCHES AND HUNDREDTHS, ON DAYS IT OCCURRED.																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Tot'l.
NORTHERN DIVISION.																																	
County.	*Postoffice.*																																
Boone	Belvidere	.64																	.09										.34				1.07
McHenry	Marengo	.30											.05						.02					.17					.22		.04		.80
Ogle	Polo	.60								.10									.40					.20				.15					1.45
DeKalb	Sycamore	.35																	.05					.01				.20		.05	.05		.71
Cook	Chicago	.30	.09						.17				.05		.01	.02			.13	.10				.19	.07			.10	.03		.13		1.39
Kane	Aurora		.52										.05						.18										.17	.02	.20		1.14
Lee	Prairieville	.70										.08							.12					.10				.10	.08		.12		1.30
Whiteside	Morrison																																....
Rock Island	Rock Island	.20																					.05	.18									.43
Warren	Monmouth	.60										.10								.12								.22			.02		1.06
Peoria	Peoria	.21							.02				.05						.20					.03				.12		.06	.01		.70
CENTRAL DIVISION.																																	
Logan	Atlanta	.24						.08					.16						.16				.08					.05					.75
Menard	Petersburg																		.20	.01				.01					.01				.23
Sangamon	Springfield	.38	.12		.06			.10					.05						.60	.14					.02			.02		.01	.01		1.51
Scott	Merritt																																....
Pike	Griggsville	.11		.04	.02			.14											.37	.03													.71
Christian	Pana																																....
Coles	Mattoon	.20			.08			.12					.03						.20	.25				.01				.01					.90
SOUTHERN DIVISION.																																	
Crawford	Palestine	.60			.50				.35				.01		.02					.40												.02	1.90
Bond	Greenville	.50			.20			.50											.50	.50													2.10
St. Clair	Mascoutah	.20			.21		.20	.36							.14				.20	.11													1.42
Marion	Centralia																																....
Perry	Swanwick	.11			.08			.35							.30				.20	.08									.03				1.15
Hamilton	McLeansboro				.30			.50							.67					.25	.11							.05		.09			1.97
Union	Anna	.16			.36			.46							.50				.35	.09											.09		2.01
Pope	Golconda	.15			.16		.10	.60							.56				.16	.20								.10		.04	05		2.12
Alexander	Cairo	.16			.07	.03		.54	.04		.04				.52				.37	.06	.01			.03	.01				.04	.02	.38		2.32

Distribution and amount of precipitation for February, 1884, reported to the Illinois Department of Agriculture, by Volunteer and Signal Service Observers.

STATION.		RAINFALL OR MELTED SNOW, IN INCHES AND HUNDREDTHS, ON DAYS IT OCCURRED.																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
NORTHERN DIVISION.																																
County	*Postoffice.*																															
Boone	Belvidere																															
McHenry	Marengo				.50		.02		.03	.20			.66	.22				.07		.25				.20	.20	.05						2.20
Ogle	Polo	.02	.65						.25	.15			.15	.20			.10			.33				.25				.20				2 25
DeKalb.	Sycamore				.20		.05		.20				.70	.20			.05	.05		.35				.08		.05				.05		2.15
Cook	Chicago				.60	.32	.03		.01	.15		.10	1.13	.15			.03	.22		.15			.02		.18	.04		.05				3.27
Kane	Aurora					.92	.08	.03	.09	.05		.06		1.08			.10	.07	.02	.89				.30	.20	.13						3.72
Lee	Prairieville				.75				.20				.50	.10				.18		.55						.05		.05		07		2.75
Whiteside	Morrison																															
Rock Island	Rock Island			.16					.05			.23	.10																			.54
Warren	Monmouth													.80				.17		.05					.09					.05		1.16
Peoria	Peoria			.95				.01	.10		.22	1.08		.10			.38	.07		.25									.02			3.18
CENTRAL DIVISION.																																
Logan	Atlanta				1 00				.10			.13	.96	.01			.15	.40	.10													2.85
Menard	Petersburg				.40	.60			.10				1.40	.08				.50		.12												
Sangamon	Springfield				.57	.37	.03	.03	.16	.12	.10	.40	1.14	.40				.78		.13									.01			4.24
Scott	Merritt.																															
Pike	Griggsville				.90	.15					.08	.23	.97	.02			.38	.40		.65												3,78
Christian	Pana				.50	.25	.25						1.75					.50		.75												3.50
Coles	Mattoon				1.22		.44	.08	.20			.33	1.76	.25			.01	.46		.60	.08								.01			5.44
SOUTHERN DIVISION.																																
Crawford	Palestine				80		1.50			.50		.20	.05	.10				.30		.90								03	.02			4.40
Bond	Greenville				1.50	1.00			.70		.75	1.10	1 50	.25			.50			1.60												8.90
St. Clair	Mascoutah				1.80				.20		.10		3.00				1.60															6.70
Marion	Centralia				.90	1.10	.55				.10		1.15	.17				.27		.18												4.42
Perry	Swanwick				1.42	.98	1.42			.20		.29	1.13	.08				.18		.45								.03				6.18
Hamilton	McLeansboro				.71	.81		.06	.55		.23	.07	.39	.27				.31		.27								.18				3.87
Union	Anna			.42		.57	1.32		.40			.65	.26	.32				.47		.79								.18				5.38
Pope	Golconda			.23		.22	1.86	.54	.70		.42		.40	.46				.66		.74								.38				6.61
Alexander	Cairo				.07	1.17	1.24	.18	.28		.51	.11	.13	.43			.01	.58		.42			.33		.01			.27				5.58

SUMMARY of Meteorological Observations for the Month of March 1884, *made to the Department of Agriculture April* 1, 1884. *Hours of Observation: 7 A. M., 2 P. M. and 9 P. M.*

STATIONS.			BAROMETER.			THERMOMETER.			HUMIDITY.	WIND.		RAIN.				
		Elevation above sea level	Highest barometer during month	Lowest	Mean	Highest temperature	Lowest	Mean	Mean	Prevailing	Maximum velocity or force	Total rainfall or melted snow	No. of days on which 0.01 or more rain or melted snow fell	No. days on which cloudiness averaged 8 or more on a scale of ten	Depth of snow, in inches, on ground at close of month	Total snowfall, in inches, during the month
		Feet.	Inch	Inch	Inch	Deg.	Deg.	Deg.	Per cent.	Direction.	Miles	Inch	No.	No.	Inch	Inch
NORTHERN DIVISION.																
County.	*Postoffice.*															
McHenry	Marengo	925	......	......	......	64.30	10.00	29.20	......	NE	5	1.51	12	14	......	5.00
Ogle	Polo	......	......	......	......	65.00	-7.00	29.50	......	NE	......	2.17	9	18	......	6.00
DeKalb	Sycamore	800	......	......	......	63 00	-7.00	30.75	......	NE	4	2.02	11	16	......	3.50
Cook	Chicago	657	30.479	29.382	30.034	59.20	-.09	34.20	67.7	N	4	5.16	18	......	......	......
Kane	Aurora	676	30.360	29.320	30.010	66.00	-6.00	32.40	80 0	NE	4	2.30	11	14	......	1.80
Lee	Prairieville	725	30.230	29.100	29.824	66.00	-2.00	33.80	75.4	E & N	4	2.03	10	14	......	4.75
Rock Island	Rock Island	......	......	......	......	68.00	-.05	31.45	......	......	......	1.35	7	......	......	......
Warren	Monmouth	......	29.780	28.710	29.430	68.00	-2.00	31.70	......	NE	5	3.01	13	13	......	5.50
Peoria	Peoria	......	30.023	28.917	29.627	67.00	0.°00	38.27	72.0	E	5	2.17	10	14	......	3.00
Average		......	30.174	29.086	29.785	65.17	-3.79	32.72	73.8	NE	4	3.41	11	11	......	4.22
CENTRAL DIVISION.																
Menard	Petersburg	421	30.670	29.170	29.500	66.00	2.00	34.00	......	SE	3	1.85	1	18	......	......
Sangamon	Springfield	640	30.441	29.436	30.038	66.50	7.00	40.00	70.7	S	5	3.70	19	10	......	......
Logan	Atlanta	......	......	......	......	70.00	2.00	37.37	......	NE	......	2.80	10	16	......	7.00
Pike	Griggsville	625	30.600	29.550	30.120	66.00	-4.00	37.50	......	SW	4	3.36	12	16	......	6.15
Christian	Pana	......	......	......	......	62.00	2.00	32.00	......	SE	5	1.50	7	19	......	10.00
Coles	Mattoon	728	......	......	......	70.00	-3.00	41 00	......	N	......	2.75	9	15	......	7.15
Average		......	30.570	29.385	29.886	66.75	1.00	36.98	70.7	SE	4	2.64	10	16	......	7.57

Summary—Continued.

STATIONS.		Elevation above sea level	BAROMETER.			THERMOMETER.			HUMIDITY.	WIND.		RAIN.			Depth of snow, in inches, on ground at close of month	Total snowfall, in inches, during the month
			Highest barometer during month	Lowest	Mean	Highest temperature	Lowest	Mean	Mean	Prevailing	Maximum velocity or force	Total rainfall or melted snow	No. of days on which 0.01 or more rain or melted snow fell	No. days on which cloudiness averaged 8 or more on a scale of ten		
		Feet.	Inch	Inch	Inch	Deg.	Deg.	Deg.	Per cent.	Direction.	Mil's.	Inch	No.	No.	Inch	Inch
SOUTHERN DIVISION.																
Crawford	Palestine	......	......	......	......	71.00	4.00	44.16	......	S	4	1.79	13	10	......	2.00
St. Clair	Mascoutah	......	......	......	......	66.00	6.00	......	......	......	......	5.60	......	......	......	2.90
Marion	Centralia	......	......	......	......	70.00	2.00	42.00	......	......	4	2.10	......	7	......	5.50
Hamilton	McLeansboro	......	......	......	......	75.00	7.00	43.74	......	NE	6	2.55	10	15	......	3.50
Union	Anna	630	30.450	29,550	30.077	72.09	15.00	45.72	......	NE	5	4.05	11	16	......	1.70
Pope	Golconda	......	......	......	......	76 00	14.00	46.66	......	E	5	4.04	10	16	......	1.50
Alexander	Cairo	377	30.462	29.551	30.069	71.00	19.00	47.60	68.5	S	6	4.20	15	13	......	......
Average		......	30.456	29.550	30.073	71.57	9.57	44.98	68.5	NE	5	3.47	12	13	......	2.85
State average		......	30.400	29.340	29.915	67.83	2.26	38.23	71.0	NE	4	3.17	11	13	......	4.88

Distribution and amount of precipitation for April, 1884, reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.

STATIONS.		RAINFALL, OR MELTED SNOW, IN INCHES AND HUNDREDTHS ON DAYS IT OCCURRED.																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
NORTHERN DIVISION.																																
County.	*Postoffice.*																															
McHenry	Marengo	.33	.12					.05	.45							1.48	.02		.02											.36		2.83
DeKalb	Sycamore	.40	.05						1.00						.50	.72	.10		.10		.01									1.18		4.06
Cook	Chicago	.34	.15					.14	.11				.02			1.74	.15		.12		.28											3.05
Kane	Aurora	.07	.19					.07	.24				.02		.02	1.18	.02		.15		.07									.55	.01	2.59
Warren	Monmouth	.54	.21						.16										.20		.22									.15		1.48
Peoria	Peoria	.51						.08	.10				.03		.05	.10			.16		.20									.06	1.33	2.62
CENTRAL DIVISION.																																
Menard	Petersburg								.20																							.20
Logan	Atlanta	.33	.07					.10	.05				.07	.06						.80	.20		.05							.01		1.14
Sangamon	Springfield	.49	.09					.03	.11		.01		.20	.06		.17			.05	.63	.20		.40	.04						.01		2.49
Pike	Griggsville	.10						.04		,05			.48		55				.11	.59		.02	.42	.05						.05	.93	3.39
Christian	Pana	.25											.25		.25					.08	.75		1.00									2.58
Coles	Mattoon	.07		.06				.02		.10			.18		1.08	.03			.06		:96		.97	.02						.01		3.56
SOUTHERN DIVISION.																																
Crawford	Palestine	.90								.02		,01		.04		.03	1.00			.25		.25			.60							3.10
Bond	Greenville												.75		.74				.68	.62		.75		:62								4.16
St. Clair	Mascoutah										.50		.40	.60		.40			.80	.20	.10	.30	.80	.20							1.00	5.30
Marion	Centralia									.10		.27		.10	.13		.60		.27				.30	.15					.20			2.12
Perry	Swanwick	.06							.03	.22			.42		.58				.27		.02		.52									2.12
Hamilton	McLeansboro	.20							.12		.22		.55	.03	1.35			.12	.05		.04	.03	.03	.18	.04							2.96
Union	Anna	.24	.05								.18		.56		1.40				.52			.55						.18	.12			3.80
Pope	Golconda	.41												.74		1.39			1.08			1.05	.10	.01				.03	.14			4.95
Alexander	Cairo					01			.01		.11		.31		1.26	.14			.98			.63	.09	.02				.07	.02			3.65

Distribution and amount of precipitation for May 1884, reported to the Illinois Department of Agricultnre by Volunteer and Signal Service Observers.

STATIONS.		RAINFALL OR MELTED SNOW, IN INCHES AND HUNDREDTHS, ON DAYS IT OCCURRED.																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
NORTHERN DIVISION.																																	
County.	*Postoffice.*																																
McHenry	Marengo	1.36			.03		.25				.91			.13					.28	.04			.46										2.56
Ogle	Polo	1.17			.13	.13	.33				.17		.43										.41										2 77
DeKalb	Sycamore	1.60			.05		.40				.30		.20	.20						.05			.38										3.18
Cook	Chicago	.68	.07		.31		.01				.07			.29					.05	.01			.03	.01									1.53
Kane	Auroro	.57			.21		.21				.55			.15					.17	.30			.08	.01		.01							2.26
Lee	Prairieville	1.00			.25	.50	.45				.62		56						,25	.25		.12		.20			.30						4.50
Whiteside	Morrison	1.00			.03	.34	.52						.25	.22					.06			.08	.16	.13		.05							2.84
Rock Island	Rock Island	.80		.10		1.35		.05		.03			.10						.95				.45	.50			.40	.18					4,91
Warren	Monmouth	.78			.30		.78	.18						.70						.64		.33	.08										3.79
Peoria	Peoria	.12		.12	.08	.90	.83						2.28						.55	.32		.04	.11				.15						5.50
Average																																	3.38
CENTRAL DIVISION.																																	
Logan	Atlanta	.96		.03	.22	.70	.73	.01			.58			.03					.87	.15		.02				.50	.18						5.25
Menard	Petersburg	.45		.30			1.20	.45							.20					1.50						.65	.10						4.85
Sangamon	Springfield	.63		.41	.09	.89	.31	.54											.77	.04		.02				.07	.07						3.79
Pike	Griggsville	.43		.14	.03	1.27	.40	.04											2.67			.16	.21			.11							5.46
Coles	Mattoon	98			.63		.83	.10						.01					1.48			.11		.01		.01	.36	.38					4.90
Christian	Pana	.75			.25		1.25																										2.25
Macoupin	Bunker Hill	.60		.28	.18	.75	.28	.08				.08		.12					1.55	.16		.05				.20							4.27
Average																																	4.39
SOUTHERN DIVISION.																																	
Crawford	Palestine	1.05		.30	1.00	.20	.30	.10						1.10					.50	.75			.03			.03	.01	.01					5.38
Bond	Greenville	2.25	.87	.75		1.28						.50						.02	1.17	.05			.25			.75							7.89
Madison	Collinsville																																4.21
Marion	Centralia	1.22		.70	.30	.26	.10	.10				.10		.17					.17			.15			.05		.05						3.37
St. Clair	Mascoutah		1.60	1.20	1.10	.80	.20	.10	.30		.40		.80					.50				.40				.10			.20				7.70
Perry	Swanwick	2.03		1.38	.53	.07		.06					.25	.11					.18			.20				.06							4.84
Hamilton	McLeansboro	.10		.60	.66	.79		.08				.11		.01					.06			.27	.02					.10					2.80
Union	Anna	.39			1.18	.70	.18						1.32	.05					.53			.52				.12							4.99
Pope	Golconda	.17		.75	.50	.40	.35	.12				.60	.40	.43					.22			.47	.30			.03							4.74
Alexander	Cairo	.19		.27	.24	.46	.23	.05	.02			.02	.87	.15					.24			.26	.32	.02		.52		.01					4.57
Average																																	5 04
State average																																	4.27

Distribution and amount of precipitation for June, 1884, reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.

STATIONS.		RAINFALL OR MELTED SNOW, IN INCHES AND HUNDREDTHS, ON DAYS IT OCCURRED.																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
NORTHERN DIVISION.																																
County.	*Po-toffice.*																															
McHenry	Marengo	.10	.35		.04	.12				1.41								.04	.41	.03			.70		1.01	.01						4.22
Ogle	Polo	1.23								.85							.34		1.65			.23										4.30
DeKalb	Sycamore	.30	.35		.45	.05				.40							.20		.35	.72	.01	.60	.40	.40	.30							4.53
Cook	Chicago	.09	.55		.22														.29				.59			.37						2.11
Kane	Aurora	.07	.13		.17	.03	.14			.04								.14	.14	.01	.18	.53	.02		.01	.57						2.18
Lee	Prairieville		.65	.35		.05				.45							.25		1.00	.25		.25	.03	.05	.02							3.35
Whiteside	Morrison	.21	2.55	.03		.02				.12								.6	.25			1.14			.45							4.83
Rock Island	Rock Island																															
Warren	Monmouth	.20	1.36	.28			.40		.80	.34									.08			.43	.04	.04	1.10							5.07
Peoria	Peoria	.48	.66	.05	.02	.04	.05		.68	.14							.25	.07	.55			.83			.05							3.87
Average																																3.83
CENTRAL DIVISION.																																
*Logan	Atlanta		.61	.50	.15			.35	2.37	.39									.20	.65												5.22
Menard	Petersburg		.85	.10	.15	.25		.30		.95	1.00	.60	.25					.25	.25	1.50	.60		1.15	.70	.45							9 35
Sangamon	Springfield	.04	.66	.34	.17	.19			1.72	.77	.31									1.96			.01		.02	.01						6.20
Pike	Griggsville	.04	.43	.28	.14	.03		1.09	2.16	.23										.21	.16	.08		.10	.14	.11						5.20
Coles	Mattoon		.81	.15	.18	.32	.22		.40	.63	.88	.60								1.46					.96	.01	.26					6 88
Christian	Pana		1.00	.12				.06		1.50															.25							2.39
Macoupin	Bunker Hill	.02	.67		.28				1.00	.37	.23					.10	.26			.03			.75			.21	.04					3.96
Average																																5.60
SOUTHERN DIVISION.																																
Crawford	Palestine			.80	.35	.80	.75		.50	1.13	.02					.01				.73												5.09
Bond	Greeneville		1.50	.05		1.00				1.05	1.00							.80		.50			1.00		1.00	.25						8.15
Madison	Collinsville	.02	1.51	.02	.18				.60	.45	.21					.11	.02			.11					.31	.18	.01					3.73
Marion	Centralia																															
St. Clair	Mascoutah	.50	.30	.10	.20	.60	.10	.80	.10	1.10						.10		.20		.40					.60	.40						5.50
Perry	Swanwick		.97	1.02	.43	.05	.06			1.13	.51					.90	.13	.05		.31						.10						5.66
Hamilton	McLeansboro		.34		1.36	.45	.53	.30		.64	.70	.02			09	.77										.04				.03		5.27
Union	Anna		.93	.29	2.15		.54			.66	.24				.14	.27	.15			.17					.46	.65			.43	.47		7.55
Pope	Golconda		.42	.08	.75	.83	3.24	.53		.48		.33				.10	.09							.10			.04		.01	.52		7.52
Alexander	Cairo		.81	.05	.60	.21	.01			.22	.02	.01		.02		.20	.07			.01				.11		.18	.04	.06	.30	.01		2.95
Average																																5.71

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* Report covers only first 20 days of June.

Distribution and amount of precipitation for July, 1884, reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.

STATIONS.		RAINFALL OR MELTED SNOW, IN INCHES AND HUNDREDTHS, ON DAYS IT OCCURRED.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
NORTHERN DIVISION.																																	
County.	*Postoffice.*																																
McHenry	Marengo		.12	.18		.42			.77	.16		.02												1.40	.27	.05				.61	.19		4.19
Ogle	Polo			.21	.27				2 35			.41												1.66	.51			.16			.82		6.39
DeKalb	Sycamore		.10	.80	.28			.10	1 25	1.30		.10	.25											1.50	1.35	1.20	.20			.01	.40		8.84
Cook	Chicago		.15		.18	.25			.17	.02														.70	.78	.03	.73			.02	.56	.12	3.71
Kane	Aurora		.90			.30			1.00	.04			.15											1.39	.60	.32	.11			.22	1.30		6.33
Lee	Prairieville			.88	1.12				2.00			.56						.12						2.00	.38	.25	.25		.36	.25	2.43		10.60
Warren	Monmouth		.28		2.00							.34						.28		.05			.20		.17		.58	.12			.04		4 06
Peoria	Peoria		.07	.08	.60				.13			.21						.10		.13			.05	1.05		.65	.53		.07				3.67
Average			.27	.43	.74	.32		.10	1.09	.30		.27	.20					.17		.09			.12	1.36	.58	.42	.40	.14	.21	.18	.82	.12	5.97
CENTRAL DIVISION.																																	
Logan	Atlanta		.05	.25	.50					.10			.16					.16						.65	.93	1.00	.39	.02	.02				4.22
Menard	Petersburg		.02	.30					.30									.55						.20	.80	.05	1.00						3.22
Sangamon	Springfield			.39		.01			.19	.51			.08			.01		.20					.13	.46	.79	.05	.31	.05	.08		.35	.01	3.62
Pike	Griggsville		.08	.42				.24		.11		.25		.21		.46	.44						.09		.64			.04	.06				3.04
Coles	Mattoon			.31		.51			.42	.03			.02				.66						.01	.03	1.13		.24		.23	.01			3.65
Christian	Pana																		.25					1.25	.75		1.00	.75					4 00
Average			.05	.33	.50	.26		.24	.30	.16		.25	.09	.21		.23	.55	.30	.25				.08	.53	.84	.37	.59	.21	.10	.01	.35	.01	3.62
SOUTHERN DIVISION.																																	
Crawford	Palestine			.50		.02			.30	1.30									.10						.25	.25	.40		.22				3.34
Bond	Greenville	.25	.75	.75		.87							.37			.75		1.50						.12	.25		.50	.56			.15		6.82
Madison	Collinsville							.09						.02		.51		.21							.36	.34	.02	.20	.46				2.21
St. Clair	Mascoutah			.20								.10	.10			.30		.20								.30		.10				.10	1.40
Perry	Swanwick			.40				.04	.06	.02			.03			.62		.02										.20	.10		.41		1.90
Hamilton	McLeansboro															.08		.18								.26		.17	.84		.25		1,78
Union	Anna	.14		52		.46									.92	.84		.12									.03		1.42	.10		.94	5.49
Pope	Golconda	.42		.10		.29				.28					.83	.33										.51		.26	1.29		1.18		5.49
Alexander	Cairo	.06	.07	.29		2.16									.39	1.14		.01									.02	.40	.57	.18		2.14	7 34
Average		.22	.41	.42		.76		.06	.18	.53		.10	.17	.02	.68	.57		.32	.10					.12	.29	.33	.19	.27	.70	.14	.50	1.06	3.97
State average		.22	24	.39	.62	.45		.13	.52	.33		.21	.15	.11	.68	.40	.55	.26	.17	.09			.10	.67	.57	.37	.39	.21	.34	.11	.56	.40	4 52

Distribution and amount of precipitation for August, 1884, reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.

STATIONS.		RAINFALL OR MELTED SNOW, IN INCHES AND HUNDREDTHS, ON DAYS IT OCCURRED.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
NORTHERN DIVISION.																																	
County.	*Postoffice.*																																
McHenry	Marengo	....	....	.47	.02	....	.61	....	..	..	..	..	..	..	....	..	....	....	.23	....	.15	.02	....	..	....	.32	....	....	1.42	....	.12	..	3 36
Ogle	Polo	....	.82	.06	.04	....	.65	.11	..	..	..	..	..	..	....	..	....	.43	....	....	....	....	....	..	.34	....	....	.33	.03	....	....	..	2.81
DeKalb	Sycamore	....	....	....	.60	....	.60	....	..	..	..	..	..	..	....	..	....	....	.25	....	.50	....	....	..	.10	.10	....	.01	1.22	....	.05	..	3.43
Cook	Chicago	....	....	.28	.02	....	.14	....	..	..	..	..	..	..	....	..	....	....	....	....	.35	.01	....	..	.08	.11	....	....	1.27	....	.29	..	2.55
Lee	Prairieville	....	.93	....	....	....	.85	.50	..	..	..	..	..	..	....	..	....	.01	.87	....	....	....	....	..	....	.25	....	....	.65	....	....	..	4.06
Rock Island	Rock Island	....	.90	....	....	.25	....	....	..	..	..	..	..	..	....	..	.35	.50	....	.12	....	....	....	..	....	....	....	1.70	.45	....	....	..	4.27
Warren	Monmouth	....	1.10	....	.06	....	.06	....	..	..	..	..	..	..	....	..	....	.36	....	....	.10	....	....	..	.01	....	....	....	1 15	.07	....	..	2.91
Peoria	Peoria	....	....	1.20	.01	....	.01	....	..	..	..	..	..	..	....	..	....	....	....	....	.21	....	....	..	.10	....	2.60	....	....	....	....	..	4,13
Kane	Aurora	....	....	.37	....	....	.15	....	..	..	..	..	..	..	....	..	....	....	....	.03	.05	....	....	..	.15	....	....	1.73	....	....	....	..	2.48
Average		....	.94	.48	.12	.25	.38	.30	..		..	..	..	..	....	..	.35	.32	.45	.07	.23	.01	....	..	.13	.19	2.60	.94	.88	.07	.15	..	3.33
CENTRAL DIVISION.																																	
Logan	Atlanta	....	....	1.00	....	....	....	.91	..	..	..	..	..	..	....	..	....	....	....	....	.10	....	....	..	....	.05	....	.51	.65	...	...	..	2.50
Menard	Petersburg	.35	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	....	....	..	....	....	....	..	....	.05	....	....	1.30	.25	....	..	1.95
Sangamon	Springfield	....	....	....	....	....	....	.02	..	..	..	..	..	..	....	..	....	.01	....	....	.23	.02	....	..	...	.08	....	.17	1.00	.01	...	..	1.54
Pike	Griggsville	....	.10	....	...	....	.12	....	..	..	..	..	..	..	....	..	....	.19	....	....	.61	....	....	..	....	.52	....	.41	1.72	.22	....	..	3.89
Coles	Mattoon	....	.89	....	....	.01	....	....	..	..	..	..	..	..	....	..	....	....	...	.58	.22	....	....	..	.02	....	....	.48	....	....	....	..	2.20
Christian	Pana	....	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	....	....	....	.50	....	....	..	....	....	....	....	.75	....	....	..	1.25
Macoupin	Bunker Hill	....	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	....	....	....	.38	.05	...	..	....	.38	....	.63	.86	.29	....	..	2.56
Average		.35	.49	1.00	....	.01	.12	.10	..	..	..	..	..	..	....	..	....	.10	....	.58	.34	.03	....	..	.02	.22	...	.44	1.05	.19	....	..	2.27
SOUTHERN DIVISION.																																	
Crawford	Palestine	....	....	1.20	....	....	....	....	..	..	..	..	..	..	....	..	....	....	....	....	....	.03	.02	..	....	....	...	....	.50	....	....	..	1.75
Bond	Greenville	....	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	....	....	....	....	...	.80	..	....	.38	....	.24	1.12	1.62	....	..	4.16
Madison	Collinsville	....	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	....	....	....	.96	.52	.04	..	....	.30	....	....	....	....	....	..	1.82
Marion	Centralia	....	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	....	1.20	....	....	...	....	..	....	....	....	1.30	.70	....	....	..	3.20
St. Clair	Mascoutah	....	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	..	....	....	.40	.30	....	..	....	.10	.10	.50	.10	.10	...	..	1.60
Perry	Swanwick	....	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	....	....	....	....	.22	....	..	....	.23	....	.14	.09	.27	....	..	.95
Hamilton	McLeansboro	....	....	.41	....	....	....	.65	..	..	..	..	..	..	....	..	....	....	....	....	....	.31	.08	..	....	.09	....	.14	.35	.68	...	..	2.70
Union	Anna	....	....	....	....	....	....	.44	..	..	..	..	..	..	22	..	....	....	....	....	....	.75	.25	..	....	.77	....	22	...	....	....	..	2.65
Pope	Golconda	....	....	....	....	....	....	....	..	..	..	..	..	..	....	..	....	....	....	....	....	.16	....	..	....	.15	....	.17	....	.01	....	..	.49
Alexander	Cairo	....	....	....	....	....	....	.12	..	..	..	..	..	..	.50	..	....	....		....	....	....	....	..	....	.90	....	1.22	....	....	....	..	2.74
Average		....	....	.80	....	....	....	.40	..	..	..	..	..	..	.36	..	....	....	1.20	....	.68	.33	.24	..	....	.36	.10	.49	.47	.54	....	..	2.21
State average		.35	.71	.76	.12	.13	.25	.27	..	..	..	..	..	..	.36	..	.35	.21	.82	.32	.42	.12	.24	..	.07	.26	1.35	.62	.80	.24	.15	..	2.60

Distribution and amount of precipitation for September, 1884, reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.

STATIONS.		RAINFALL OR MELTED SNOW, IN INCHES AND HUNDREDTHS, ON DAYS IT OCCURRED.																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
NORTHERN DIVISION.																																
County.	*Postoffice.*																															
McHenry	Marengo				.05			.03			.64					1.44						.78			.28	.75		.37				4.34
Ogle	Polo															2.42							.70	.80				.32	.19	.15	.45	5.03
DeKalb	Sycamore				.25			.05			.45					.90							.32	.35	.02			.85	.22	.05		3.46
Cook	Chicago							.14			.07	.02					.18							.31	.47			1.09	.01			2.29
Kane	Aurora							.08			.61					.38	.38						.01	.58	.30			.36	.05		.05	2.42
Lee	Prairieville				.45			.12								1.62						.20	.75	.63			1.15		.38		.50	5.80
Rock Island	Rock Island		.40				1.95				.24					1.50						.15	.40	.40		.75		.50		1 00	.30	7.59
Peoria	Peoria							.42									.38					1.45	1 70	1.20			.46		.10		.05	5.76
Average			.40		.23		1.95	.14			.40	.02				1.58	.31					.64	.65	.61	.27	.75	.80	.58	.16	.40	.27	4.59
CENTRAL DIVISION.																																
Logan	Atlanta							.05									.37															.42
Menard	Petersburg							.40			.15												.50				3.00	.20				4 25
Sangamon	Springfield							.88			.44	.07					.23					.05	.72	.80	.26		2.20	1.34	.14		.02	6.85
Pike	Griggsville							.53			1.58					.94				.03				2.40			1.90	.33	.33		.07	8.11
Coles	Mattoon							.08									.07	.09					.98	.27	.11		.48	.07	1.04	.01	.90	4.70
Christian	Pana							.25								.25	.13					1.33	2.75				1.12		1.25		.25	7.33
Macoupin	Bunker Hill										.10						.15	.40						.08	.15		3.65	1.44	.74		.48	7.19
Average								.36			.57	.07				.60	.19	.24		.03		.69	1.24	.89	.17		2.06	.74	.70	.01	.34	5 55
SOUTHERN DIVISION.																																
Crawford	Palestine																	.36					.93	.02	.06	1.30	1.50	.20		.27	.65	5.29
Bond	Greenville																.56	1.50					.03	.25			.50	.05	2.25		1.00	6.14
Madison	Collinsville															.41	.11								.16	.34		.94	.56	.27	.87	3.66
Marion	Centralia																.15					.15			1.00		1.17	.90			1.30	4.67
St. Clair	Mascoutah																.10							.60			.40		1.30		1.40	3.80
Perry	Swanwick							.20										.02					.11		.75		.22	.14	.21	1.16	.04	2.85
Hamilton	McLeansboro																						.24		1.01			.09	.05	1.79	.62	3.80
Union	Anna																						.20		.67		.20		.78	1.48		3.33
Alexander	Cairo																.06	.02					.12		1.04		.18	.34	.36	2.90		5.02
Average								.20								.41	.20	.47				.15	.27	.29	.67	.82	.59	.38	.79	1.31	.84	4.28
State average			.40		.23		1.95	.23			.48	.04				.86	.23	.35		.03		.49	.72	.60	.37	.58	1.15	.57	.55	.57	.48	4.80

Distribution and amount of precipitation for October, 1884, reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.

Stations.		Rainfall or Melted Snow, in Inches and Hundredths, on Days it Occurred.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Northern Division.																																	
County.	*Postoffice.*																																
McHenry	Marengo	.63			.26	.15		.38	.66			.03					.76					.56					.39					.03	3.85
DeKalb	Sycamore	.61			.35	.60		.55	1.00			.20					.75		01			1.24					.45						5.76
Cook	Chicago	.01			.14	.06		.20	1.26			.05					.73					,77					.36	.01					3.59
Kane	Aurora	.55	.01		.26	.29		.61	1.34			.08					.92					1.15					.58	.02					5.61
Rock Island	Rock Island	.28		.20			3.00	2.50													1.20	.10				.40	.20						7.88
Peoria	Peoria				1.20	.02		2.80													.22					.56							4.80
Lee	Prairieville	.75			1.56		1.06	.87				.12					.25				.20	.68					.75						6.24
Average		.47	.01	.20	.63	.22	2.03	1.13	1.06			.10					.68		.01		.54	.75				.48	.45	.01				.03	5.39
Central Division.																																	
Logan	Atlanta				1.37	.10	.65	.10														.73					.56						3.51
Menard	Petersburg				.45	.20																			1.00		.65						2 30
Sangamon	Springfield				.18	.52		.03	.27				.02									.93					.77	.02					2.74
Pike	Griggsville				.10	.34			.68													.68					.86						2.66
Coles	Mattoon	.17			.64	.05			.04													1.50					.40						2.80
Christian	Pana				.25																	2.00				.25							2.50
Average		.17			.50	.24	.65	.06	.33				.02									1.17			1.00	.25	.65	.02					2.75
Southern Division.																																	
Crawford	Palestine																						.15				.75	.50					1.40
Bond	Greenville	1.00			1.50	.50			.25													.75					1.00						1.00
Madison	Collinsville					1.23				.12												.24					.05						1.64
St. Clair	Mascoutah									.10												.90					60						1.60
Marion	Centralia				.05				.10													.30						.50					1.00
Hamilton	McLeansboro								.18														.74					1.00					1.92
Union	Anna								.29													.29					.84						1.42
Alexander	Cairo								.21													.24	.02				.42	.67		.33			1.89
Average		1.00			.77	.86			.21	.11												.45	.30				.61	.67		.33			1.99
State average		.55	.01	.20	.63	.41	1.34	.59	.53	.11		.10	.02				.68		.01		.54	,79	.30		1.00	.36	.57	.23		.33		.03	3.38

Distribution and amount of precipitation for November, 1884, reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.

STATIONS.		RAINFALL OR MELTED SNOW, IN INCHES AND HUNDREDTHS, ON DAYS IT OCCURRED.																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
NORTHERN DIVISION.																																
County.	*Postoffice.*																															
McHenry	Marengo	...	...	...	.44	...	...	...	...	...	...	...	...	...	...	...	.03	...	...	...	...	...	...	1.22	...	.06	...	.04	...	...	...	1.79
DeKalb	Sycamore	...	...	1.00	.05	...	...	...	...	...	...	...	...	...	...	...	.05	...	...	...	...	...	1.28	...	.05	.05	...	...	...	...	...	2.48
Cook	Chicago	...	...	.18	.69	.02	...	...	...	...	...	...	...	...	...	...	.14	...	...	...	...	...	.09	.61	...	.02	.01	.04	...	...	...	1.80
Kane	Aurora	...	...	.46	.31	...	...	...	...	...	...	...	...	...	...	...	.06	...	...	...	...	...	.71	.37	...	...	...	...	...	...	...	1 91
Lee	Prairieville	...	...	.80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.56	...	...	...	.18	...	...	...	...	2.54
Rock Island	Rock Island	...	...	.44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.60	...	...	...	...	...	...	...	...	2.04
Peoria	Peoria	...	...	.40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.75	...	...	...	...	...	...	...	.04	2 19
Average		...	...	.55	.37	.02	...	...	...	...	...	...	...	...	...	...	.07	...	...	...	...	...	1.16	.73	.05	.04	.09	.04	...	...	.04	2.11
CENTRAL DIVISION.																																
Sangamon	Springfield	...	...	.40	.02	...	...	...	...	...	...	...	...	...	...	...	...	...	.03	.15	...	...	.19	.34	...	...	...	...	...	.16	...	1.29
Pike	Griggsville	...	...	.46	...	...	...	...	...	...	...	...	...	...	...	...	...	.32	...	...	...	...	1.55	...	...	...	...	...	...	.15	...	2.48
Coles	Mattoon	.19	...	.52	...	...	...	...	...	...	...	...	...	...	...	...	...	.01	.22	...	...	...	.52	...	...	.01	...	...	...	.36	...	1.83
Christian	Pana	.25	...	.25	...	...	...	...	...	...	...	...	...	...	...	...	...	1.00	...	...	...	...	...	.25	...	...	...	...	...	.25	...	2.00
Average		.22	...	.41	.02	...	...	...	...	...	...	...	...	...	...	...	...	.44	.12	.15	...	...	.75	.29	...	.01	...	...	...	.23	...	1.90
SOUTHERN DIVISION.																																
Crawford	Palestine	...	...	.30	.60	...	...	...	...	...	...	...	...	...	...	...	...	...	.30	...	...	...	.12	.80	...	...	...	...	.03	...	.12	2.27
Bond	Greenville	.50	...	...	1.00	...	...	...	...	...	...	...	...	...	...	...	...	...	.88	...	...	...	...	...	...	...	...	...	...	...	...	2 38
Madison	Collinsville	1.00	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.50	.16	...	...	...	.41	.03	...	...	...	...	...	.06	...	2.16
St. Clair	Mascoutah	...	.20	.90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.60	...	...	...	...	.70	...	...	...	...	...	...	...	2.40
Marion	Centralia	23	...	.80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.03
Hamilton	McLeansboro	...	.13	...	.31	...	...	...	...	...	...	...	...	...	...	...	...	...	.50	.05	...	...	.70	...	...	...	...	.16	...	...	.03	1 88
Union	Anna	...	...	...	.56	...	...	...	...	...	...	...	...	...	...	...	...	...	.56	...	...	...	1.19	...	...	...	...	...	.21	...	.06	2.58
Pope	Golconda	...	...	...	.55	...	...	...	...	...	...	...	...	...	...	...	...	...	.38	...	...	...	.89	...	...	...	...	...	.23	...	.02	2.07
Alexander	Cairo	...	...	...	.45	...	...	...	...	...	...	...	...	...	...	...	...	.33	.42	...	...	...	.05	.03	...	...	...	...	.13	...	...	2.41
Average		.58	.16	.67	.58	...	...	...	...	...	...	...	...	...	...	...	...	.41	.49	.05	...	...	.56	.39	...	...	...	.16	.15	.06	.06	2.13
State average		.40	.16	.54	.32	.02	...	...	...	...	...	...	...	...	...	...	.07	.42	.30	.10	...	...	.82	.47	.05	.02	.09	.10	.15	.14	.05	2.04

Distribution and amount of precipitation for December, 1884, reported to the Illinois Department of Agriculture by Volunteer and Signal Service Observers.

Stations.		Rainfall or Melted Snow, in Inches and Hundredths, on Days it Occurred.																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Northern Division.																																	
County.	*Postoffice.*																																
McHenry	Marengo	.01						.98					.12		.05	.02	.15	.02			.12	.05			.27			.29		.59	.59	.02	3.28
DeKalb	Sycamore	.03				.63	.72	.05					.20	.05	.02	.03	.10				.30			.30				.05	.56	.28	.82		4.14
Cook	Chicago					.24	.68	.05					.07	.07	.09		.08	.06			.19	.01		.06	13	11		.62	.57	.53	.56	.09	4.21
Kane	Aurora					.52	1.04	.07					.22		.16		.18				.18				.14	.03		.67	.39	.33	.55	.09	4.57
Lee	Prairieville	.02				.31	.75						.25		.25		.20	.10			.25	.25		.38				.75	.68	.50	.87		5.56
Will	Wilton Centre					.15	.79						.37			.11	.15								1.02			.28	.39	.93	34	.32	4.84
Peoria	Peoria					.95	.13				.05		.18	.05		.05				.06				.14		.14		.43	.64		.39		3.21
Average		.02				.47	.68	.29			.05		.20	.06	.11	.05	.14	.06		.06	.21	.10		.22	.39	.09		.44	.54	.53	.59	.13	4.26
Central division.																																	
Sangamon	Springfield					.06	.84				.31	.19	.08		.05					.11	.01	.01	.04			.14		1.32	1.47	.07	.49		5.19
Pike	Griggsville					.26	.11				.46	.13			.12		.01									.16		1.28	.41	.14	.35		3.43
Coles	Mattoon					.75	.63				.30	.38			.48		.01			.02	.03					.20		1.30	.58	.17	.60		5.45
Christian	Pana						1.08					.25																2.00	.25		.50		4.88
Average						.36	.66				.36	.24	.08		.22		.01			.06	.02	.01	.04			.17		1.47	.68	.13	.48		4.74
Southern Division.																																	
Crawford	Palestine					.33	.67						.20		.40		.05					.10				.12			2.40	.32		.25	5.84
Bond	Greenville						1.00					1.12																3.00		1.00	.50	1.00	7.62
Madison	Collinsville					.02	.02				.29	1.04			.40	,06	.05				.04	.01	.02			.09		1.70	1.32		.62		5.68
St. Clair	Mascoutah						.30					.80														1.10		3.00	.90			.80	6.90
Marion	Centralia						1.90					1.30																1.60	.40	.30			5.50
Hamilton	McLeansboro					.76	.03						1.63		.36			.03										3.22	.95	.72	.54		8.24
Union	Anna						.72					1.49			.28			.05	.32							.07			4.01	1.27	1.02	.34	9.57
Pope	Golconda					.18	.84					1.94		.29			.08	.13			.21							1.79	.88	.87	.94		8.15
Alexander	Cairo					.17	.44					2.46	.03		.37				.04		.05	.15				.01		1.57	1.35	1.10	.92	.33	8.99
Average						.29	.66				.29	1.45	.62	.29	.36	.06	.06	.07	.18		.10	.09	.02			.28		2.27	1.53	.80	.76	.54	7.39
State average		.02				.37	.66	.29			.23	.84	.30	.17	.23	.05	.07	.06	.18	.06	.11	.07	.03	.22	.39	.18		1.39	.92	.49	.61	.33	5.46

Precipitation at Stations in Illinois, 1878.

Stations.		January...	February..	March	April......	May.......	June......	July.......	August ...	September.	October...	November.	December.	Total.....
NORTHERN DIVISION.														
County.	*Postoffice.*													
Henry..........	Geneseo........	.30	.20	3.50	4.20	5.10	3.10	2.80	5.90	1.50	3.10	.90	3.20	33.90
DeKalb	Sandwich	.75	1.10	1.10	.....	1.80	....	2.70	.....	.....	....	....	.....	.....
McHenry	Marengo	.85	1.33	2.72	2.89	4.25	2.46	4.73	3.52	1.46	4.71	1.06	2.46	32.44
Whiteside	Como............	.09	.....	.....	2.40	6 33	2.81	.....	.....	.....	....	....	.....	.....
Putnam.........	Hennepin	.02	*2.60	*2.53	5.40	6.10	3.10	1.10	5.60	.90	2.90	.10	1.80	32.15
Marshall.......	Henry	....	1.80	.....	.....	....	....	.....	.....	.....	....	....	.....	.....
Kane...........	Elgin	....	.....	.....	.....	3.19	3.09	3.22	4.03	1.59	3.31	1.46	.40	.....
Mercer.........	Aledo	....	.....	.....	.....	....	5.60	1.45	5.87	1.70	....	....	.....	.....
Whiteside	Lyndon.........	....	.....	.....	.....	....	....	4.15	5.75	.....	....	...	2.00	.....
Whiteside	Fulton	....	.....	.....	.....	....	....	.....	.....	1.80	5.43	92	.....	.....
Winnebago....	Durand.........	....	.....	.....	.....	....	....	.....	.....	.....	3.26	1.15	.35	.....
Average		.40	1.41	2.46	3.72	4.46	3.36	2.88	5.11	1.49	3.78	.93	1.72	32.83
CENTRAL DIVISION.														
Stark	Elmira..........	.13	1.03	*3.10	*3.26	4.43	3.18	1.16	6.34	*2.70	3.20	.60	.03	30.16
Peoria..........	Peoria	.50	2.25	2.10	3.75	4.45	3.49	2.58	4.42	.97	3.96	.91	2.08	31.46
Hancock........	Augusta	1.14	3 31	5.10	3.28	4.91	2 99	*3.97	*3.25	1.13	2.85	1.17	*2.50	35 60
Brown	Mt. Sterling....	1.50	3.80	4.80	3.86	6.80	3.00	4.70	7.50	2.50	2.80	1.50	3.10	45.86
Mason.	Havana	1.28	3.50	2.90	.....	....	....	.....	.....	.....	....	....	.....	.....
Knox	Galesburg......	....	.....	.....	.....	7.87	6.80	.....	.....	.....	....	....	.....	.....
Sangamon.....	Springfield.....	....	.....	.....	.....	....	2.67	.....	.....	.....	....	....	.....	.....
Macoupin	Carlinville......	....	.....	.....	.....	...	1.90	.95	.....	.....	....	....	.....	.....
Montgomery...	Hillsboro.......	....	.....	.....	.....	9.60	1.00	.90	3.80	3.20	5.00	.50	.....	.....
Average.......................		.91	2.78	3.60	3.54	6.34	3.13	2.54	5.06	2.12	3.56	.94	1.93	35.77
SOUTHERN DIVISION.														
Clay............	Louisville	3.00	3.70	1.80	4.80	5.80	3.20	6.50	3.00	*2.84	3.40	2.30	6.30	46.64
Udion	Anna	3.16	1.80	2.20	.....	5.73	....	.....	.....	.....	....	....	.....	.....
Alexander......	Cairo	....	.....	.....	5.60	4.41	4.61	2.81	3.45	2.99	2 59	3.80	3.53	.....
Jefferson	Mt. Vernon.....	....	.....	.....	.....	4.50	.75	4.00	4.70	5.00	8.00	8.00	.....	.....
Jasper..........	St. Marie	....	.....	.....	.....	....	....	1.10	1.11	.....	3.57	1.48	3.12	.....
Madison........	Upper Alton....	....	.....	.....	.....	....	....	1.29	1.03	3.07	1.73	1.75	5.43	.....
Marion..........	Centralia.......	....	.....	.....	.....	....	....	3.17	2.70	2 40	3 55	.93	1.50	.....
Pope............	Golconda.......	....	.....	.....	. .	....	....	5.66	1.12	2.96	3.74	4.80	4.73	.....
Richland	Olney...........	....	.....	.....	.....	....	....	.....	.....	1.66	7 12	2.15	2.74	.....
Average		3.08	2.75	2.00	5.20	5.11	2.85	3.50	2.44	2.99	4 21	3.15	3.91	46.64
State average................		1.46	2.31	2.69	4.15	5.30	3.11	2.97	4.20	3.30	3.85	1.68	2.52	38.41

* Estimated.

Precipitation at Stations in Illinois, 1879.

STATIONS.	January	February	March	April	May	June	July	August	September	October	November	December	Total
NORTHERN DIVISION.													
County. *Postoffice.*													
McHenry...Marengo	.85	1.54	1.15	2.30	4.97	4.81	5.39	1.96	1.20	1.38	5.30	1.47	32.32
Boone ......Belvidere	1.04	1 36	1.56	2.12	3.78	4.14	7.01	2.70	.76	2.88	5.89	2.12	35.36
Winnebago.Durand	.15	*2.60	.95	2.20	4.17	3.82	6 88	2.71	*2.96	1 65	4 18	1.05	33.32
Cook... ....Chicago	.54	1.17	2 37	1.93	3.89	3.18	5.58	.45	1.18	2.72	4.93	2.47	30.41
Kane .....Elgin	*1.49	.52	1.45	2.14	5.84	3.20	6.63	2,24	1 02	1.80	4.23	1.59	32.15
Whiteside...Lyndon	.....	.....	.....	.....	.....	.....	.....	.....	1.13	1.46	.....	.94	.....
Rock Island.Dav'nport(Ia)	.79	1.09	1 80	1.54	5.83	4 57	5.87	4.33	1.43	.92	4.70	1.02	33.89
Henry ....Geneseo	1.00	2.00	4.00	1.90	2.10	3.70	3.70	3.20	1.80	1.80	2.60	2.20	30.00
Putnam......Hennepin	.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mercer.......Aledo	.....	.....	.....	.....	.....	2 50	4.90	3 50	.....	.....	.....	.....	.....
Stark.........Elmira	.28	.24	1.31	2.16	.87	3.66	3.49	3.17	*2.70	*3 96	2.71	1.11	25.66
Peoria........Peoria	1.05	.97	1.80	2 95	.93	3.23	3.42	1.88	3.72	2.17	4.93	1.92	28.97
Average	.77	1.28	1.82	2.14	3.60	3.68	5 29	2.61	1.79	2.07	4.38	1.59	31.34
CENTRAL DIVISION.													
Hancock....Augusta	*1.39	.79	1.19	1.26	1.63	*5.82	3.15	5.20	2.06	.19	3.97	1.51	28.88
Hancock .. Keokuk,(Ia)	.50	.53	1.71	1.56	2.27	2.63	1.98	4.57	1 12	.28	3.91	1.45	22.51
Brown ......Mt. Sterling	1.05	1.15	1.80	1.60	.50	1.80	2.30	2.50	2.00	.70	4 50	1.80	21.70
Sangamon..Springfield	.....	.....	.....	.....	.....	.....	1.52	3.82	.84	1.25	5.12	2.88	.....
Macon.......Decatur	.....	.....	.....	.....	.....	.....	.....	.....	2.02	3.55	4.06	4.28	.....
Average	.98	.82	1.81	1.47	1.47	3.42	2.24	4.02	1.61	1.19	4.31	2.38	24.36
SOUTHERN DIVISION.													
Jasper ......St. Marie	1.36	1.28	4.80	2.27	1.57	3.50	1 87	3.30	1.35	1.51	4.17	3.09	30.07
Madison ....Upper Alton	1.97	1.24	2.63	2 57	1.09	*4.78	*3.69	*3.06	1.93	1.80	4.35	3.82	32.92
Clay.........Louisville	6.00	*4.97	*3.22	2.60	2.10	1.20	*3.69	5.50	1.00	2.92	5.00	3.20	41.60
Marion......Centralia	.....	.....	3.30	2 15	3.85	4.17	4.10	5.40	.....	.....	.....	3.00	.....
St. Clair.....St. Louis, (Mo)	1.64	1.48	1.92	2 31	.95	4.04	1.97	2.28	1.34	.68	4.30	2.84	25.70
Jefferson....Mt. Vernon	5.40	6.40	.....	1 00	3.00	.....	.....	.....	.....	.....	.....	.....	.....
White.......Grayville	.....	.....	.....	.....	.....	4.00	6.00	8.00	.....	.....	4.00	6.00	.....
Pope........Golconda	2.48	2.39	3.15	3.89	1.83	5.95	3.99	11.31	1.65	5.11	4.48	8 61	54.84
Alexander ..Cairo	2.81	2.03	2 95	2.93	2.79	8.70	1 37	7.05	.93	3.87	3.25	6.63	45 31
Average	3.09	2.83	3.14	2.46	2.15	4.54	3.33	5.73	1.37	2.65	4.22	4.65	38.41
State average	1.61	1.64	2.26	2.02	2.41	3.88	3.62	4.12	1.59	1.97	4.30	2,87	31.37

* Estimated.

Precipitation at Stations in Illinois, 1880.

STATIONS.	January...	February..	March	April.......	May.......	June	July	August	September	October ...	November.	December.	Total ......
NORTHERN DIVISION.													
County. *Postoffice.*													
Winnebago....Durand.........	1.50	2.40	2.60	5.55	3.51	5.49	4.32	8.11	8.44	.76	1.31	.90	44.89
Winnebago....Rockford........	....	....	....	.....	....	....	1.74	2.98	2 51	1.20	1.73	.60	......
Boone..........Belvidere	3.63	1.24	2.80	*3.16	4.66	6.51	6.21	4.44	6.92	2.19	1.83	1.76	45.35
McHenry ......Marengo........	4.14	1.62	1.40	3.10	2.68	5.28	2.68	4.25	4.02	2.37	1.01	.75	33.30
Kane ....Elgin	4.55	3.43	2.36	4.19	6.43	5.40	4.39	3.51	4.25	3.09	1.24	.55	41.39
Whiteside .....Lyndon..........	3.85	1.92	2.37	3.42	....	....	....	.....	.....	....	.....	.....	......
Whiteside .....Morrison	....	....	....	.....	....	5.74	3.35	4.15	4.94	1.62	1.30	.25	......
Cook ....Chicago	3.53	2.91	2.23	5.20	4.97	3.50	3.07	4.47	2.25	3.09	.87	1.01	37.10
Henry..........Geneseo.........	3.30	.80	3.10	3.10	7.00	6.00	1.50	6.20	4.70	.80	1.50	.50	38.50
Rock Island ...Davenport, (Ia.)	3.13	1.72	2.68	4.50	5.09	7.21	4.31	5.90	4.87	.94	1.23	1.15	42.73
Stark ....Elmira...........	3.18	2.30	3.18	*3.16	5.23	3.26	2 31	2.52	1.74	1.73	1.83	.43	30.97
Peoria ....Peoria...........	3.38	3.95	3.30	5.94	6.73	2.32	3.17	3.38	3.09	1.75	1.92	.96	39.89
Average	3.32	2.23	2.60	4.13	5.14	5.07	3.37	4.44	4.43	1.68	1.43	.80	39.33
CENTRAL DIVISION.													
Hancock.......Keokuk, (Ia.)...	3.91	1.94	1.83	4.79	5.92	3.06	2.25	3.81	3.21	2.02	1.13	.67	34.54
Hancock.......Augusta.... ...	2.51	2.08	2.16	5.74	5.38	2.68	1.35	2.44	2.66	1.38	*2.82	*2.50	33.70
Fulton ....Canton...........	....	....	....	.....	....	....	....	11.02	2.46	1.76	2.16	.78	......
Champaign....Champaign	....	....	....	.....	....	....	....	.....	.....	....	1.80	1.53	......
Brown ....Mt. Sterling....	2.50	2.90	1.50	2.20	6.80	2.50	.80	2 40	1.90	1.70	*2.82	*2.50	30.52
Sangamon.....Springfield......	2.70	2.89	2.37	3.23	5.76	2.47	1.82	1.80	3.15	2.04	1.60	1.10	30.93
Macon ....Decatur	2.65	....	....	.....	....	....	....	.....	.....	.74	2.19	.....	......
Average	2.85	2.45	1.96	3.99	5.96	2.68	1.55	4.29	2.68	1.61	2.07	1.51	32.42
SOUTHERN DIVISION.													
Jasper ....St. Marie	4.70	2.06	2.79	2.53	4.07	2.91	2.55	*3.06	3.01	2.85	4.75	*3.75	39.03
Madison ....Upper Alton....	1.93	2.83	2.65	3.08	3.15	2.48	4.40	1.42	1.47	2 00	3.06	2.94	31.41
Clay.............Louisville	*2.99	2.20	2.70	2.50	4.50	4.00	2.50	4.50	7.70	3.20	3.15	2.50	42.44
Marion.........Centralia........	3.60	2.80	4.40	3.50	5.75	2.80	7.80	.65	1.10	2.70	3.80	1.80	40.70
St. Clair........St. Louis, (Mo.)	3.83	2.65	2.51	3.31	3.44	2.46	5.17	1.53	3.10	2.09	2.67	1.80	33.56
White ....Grayville.......	4.00	4.50	6.50	4.00	6.30	6.00	4.00	*3.06	*2.84	4.00	*4.13	2.00	51.33
Union ....Anna	....	....	....	.....	....	....	3.78	2.20	3.48	4.54	4.18	3.24	......
Saline.......... Riley	....	....	....	.....	....	....	2.68	4.24	4.02	2.37	1.01	.....	......
Pope ....Golconda.......	5.67	5.51	4.27	3.74	7.50	3.57	6.07	2.56	4.53	6.71	4.37	1.67	56.17
Alexander.....Cairo	4.56	5.01	4.52	3.25	4.64	2.92	4.34	2.61	4.55	6.96	3.98	2.22	49.56
Average	3.91	3.44	3.79	3.24	4.92	3.39	4.33	2.58	3.58	3.74	3.52	2.43	43.14
State average............	3.36	2.71	2.78	3.79	5.34	3.71	3.08	3.80	3.56	2.34	2.34	1.58	38.30

*Estimated.

Precipitation at Stations in Illinois, 1881.

STATIONS.		January...	February..	March	April......	May.......	June	July.......	August....	September	October...	November.	December.	Total .....
NORTHERN DIVISION.														
County.	*Postoffice.*													
Winnebago.....	Durand..........	.....	3.90	2.60	....	....	.....	....	....	....	.....	....	....	.....
Winnebago.....	Rockford.........	1.71	6.50	3.49	1.38	2.39	6.44	7.72	.33	3.72	5.37	2.17	2.99	44.21
Boone...........	Belvidere	2.26	6.07	4.64	1.92	3.57	7.20	....	....	6.08	.....	....	....	.....
McHenry	Marengo..........	1.54	5.28	6.42	.98	3.10	5.92	5.88	1.01	5.47	6.81	2.36	2.69	47.22
Cook	Chicago	.87	5.98	2.99	1.84	1.85	5.93	4.31	.54	4.34	6.89	5.97	2.67	44.18
Kane	Elgin.............	.....	2.66	.70	1.19	....	.....	....	....	....	.....	....	....	.....
DeKalb..........	Sycamore.........	.....	.....	....	....	3.50	11.40	7.05	.80	5.10	8.20	3.60	3.75	.....
Lee..............	Prairieville	1.00	6.75	5.41	2.18	1.50	9.07	2.18	1.25	4.45	8.20	3.37	3.06	48.42
Whiteside.......	Morrison.........	1.78	4.68	2.85	2.03	2.88	9.79	2.39	.75	3.90	5.76	2.31	2.27	41.39
Whiteside.......	Sterling..........	2.15	5.70	3.65	2.66	...	.....	....	....	....	.....	....	....	.....
Rock Island	Davenport, (Ia)..	1.34	4.14	3.33	1.11	1.34	7.94	.91	.83	5.59	6.85	2.19	1.71	37.28
Henry...........	Geneseo..........	3.00	5.50	6.00	2.50	.50	6.00	1.50	.10	5.60	7.90	.50	1.40	40.50
Stark............	Elmira............	1.05	1.43	3.54	1.26	1.84	8.36	3.94	.62	4.16	5.93	2.62	1.44	36.19
Peoria.	Peoria	.52	3.51	3.52	1.62	3.50	7.20	2.43	1.38	4.05	5.56	4,26	3.50	41.05
Warren	Monmouth........	*1.39	*3.90	3.80	1.70	1.29	11.82	2.86	2.33	3.50	7.48	2.17	1.86	44.10
Average		1.57	4.71	3.78	1.80	2.27	8.06	3.74	.90	4.66	6.81	2.86	2.48	42.45
CENTRAL DIVISION.														
Hancock.........	Keokuk, (Iowa) ..	.50	2.58	2.42	3.12	1.35	8.70	3.08	.86	4.10	8.01	2.59	1.70	39.01
Fulton	Canton...	.66	4.53	5.88	1.95	.93	9.67	3.90	1.57	2.96	7.10	3.64	3.23	46.02
McDonough	Prairie City......	1.50	5.25	7.50	3.40	2.10	6.50	2.90	2.20	2.40	5.60	3.70	3.50	46.55
Champaign.....	Champaign	.89	6.49	5.30	1.36	1.95	4.71	1.07	.64	4.89	5.77	7.78	8.54	49.39
Sangamon......	Springfield.......	.84	5.85	4.45	1.96	2.86	4.96	3.37	4.03	6.43	10.02	6.93	4.81	56.51
Coles	Charleston.......	.....	.....	....	....	....	.....	1.12	(a)	3.95	7.30	8.20	3.50	.....
Macoupin.......	Carlinville........	.....	.....	....	....	....	5.62	1.91	....	....	.....	....	....	.....
Average		.88	4.94	5.11	2.36	1.84	6.69	2.48	1.86	4.12	7.30	5.47	4.21	47.50
SOUTHERN DIVISION.														
Jasper	St. Marie..........	.....	.....	....	..	....	.....	1.70	.35	3.17	6.99	5,91	3.11	.....
Madison	Upper Alton......	.39	5.44	1.68	3.02	4.50	5.54	1.79	.03	5.60	6.97	8.05	1.41	44.42
Clay..............	Louisville........	.....	1.85	3.00	..	2.50	7.00	....	....	....	.....	....	....	.....
Marion..........	Centralia.........	1.50	1.60	2.00	3.50	2.30	5.35	.20	.60	4.20	6.00	5.50	2.67	35.42
St. Clair.........	St. Louis, (Mo)....	.49	4.17	1.95	3.14	3.96	2.74	2.13	.31	3.14	7.21	6.74	1.40	37.37
White	Grayville.........	*2.99	*4.97	4.60	6.00	2.00	6.00	0.00	.50	4.50	3.50	4.50	4.15	43.71
Perry............	Swanwick	.....	.....	....	3.34	2.55	4.42	1.00	.06	3.16	6.40	....	....	.....
Union	Anna..............	2.79	5.34	1.99	2.29	2.57	5.35	0.00	.38	1.91	6.51	6.10	2.17	37.40
Saline...........	Riley	1.54	5.28	6.48	.98	3.10	5.62	5.88	1.01	5.47	6.81	2.36	2.69	47.22
Pope............	Golconda..	1.80	5.85	2.05	3.91	3.50	4.21	.61	.17	4.30	3.69	5.83	4.17	41.09
Alexander......	Cairo	3.56	4.92	1.33	3.62	2.44	1.81	.18	.11	2.74	2.74	4.93	3.70	32.13
Average		2.01	4.38	2.79	3.31	2.94	4.80	1.69	.35	3.82	5.68	5.55	2.83	38.84
State average.........................		1.49	4.68	3.89	2.49	2.36	6.52	2.64	1.04	4.20	6.60	4.63	3.17	43.26

* Estimated.

(*a*) Too small to measure.

Precipitation at Stations in Illinois, 1882.

STATIONS.		January	February	March	April	May	June	July	August	September	October	November	December	Total
NORTHERN DIVISION.														
County.	*Postoffice.*													
McHenry	Marengo	1.57	2.15	4.58	3.29	3.59	4.42	3.63	2.08	2.36	4.17	1.52	2.00	35.36
Stephenson	Ridott	.....	.....	...	5.79	4.55	8.14	.....	.....	.....	.....	.....	.....	.....
Cook	Chicago	1.55	2.24	3.43	6.72	5.52	5.71	3.43	4.96	.91	3.40	1.48	1.99	41.34
Kane	Aurora	.....	.....	.....	.....	.....	.....	.....	4.70	1.39	3.21	2.10	2.47	.....
DeKalb	Sycamore	1.80	1.90	4.85	6.10	3.80	7.90	4.35	2.34	1.94	4.55	2.25	2.25	44.03
Ogle	Polo	.....	.....	.....	.....	.....	.....	3.23	3.77	1.49	3.26	1.62	.33	.....
Lee	Prairieville	1.50	1.67	4.50	6.36	4.66	4.50	4.32	5.52	1.44	3.56	1.68	2.35	42.06
Whiteside	Morrison	1.08	.73	3.25	*3.16	*4.42	10.66	3.50	1.81	1.48	4.44	1.26	2.23	37.42
Henry	Geneseo	1.50	2.40	5.80	3.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stark	Elmira	.74	1.04	4.12	2.83	4.96	6.23	3.94	6.55	.93	3.19	1.38	1.15	37.06
Peoria	Peoria	1.27	3.21	3.12	2.41	6.34	11.18	2.91	1.92	1.53	3.76	2.08	1.76	41.49
Warren	Monmouth	1.00	1.15	3.66	2.93	7.00	9.92	4.12	2.51	1.24	4.40	1.60	1.38	40.91
Average		1.33	1.83	4.14	4.31	4.98	7.56	3.71	3.62	1.47	3.79	1.70	1.79	39.96
CENTRAL DIVISION.														
Ford	Paxton	.....	.....	.....	.....	.....	.....	.....	.....	1.62	.....	.....	.....	.....
McLean	Normal	.....	.....	.....	.....	.....	9.36	1.69	2.57	1.25	5.87	2.55	.....	.....
Fulton	Canton	1.24	1.93	3.57	3.41	10.92	9.10	4.75	4.63	1.39	*3.96	*2.82	*2.50	50.22
McDonough	Prairie City	1.50	3.10	6.60	5.30	7.90	16.50	3.40	3.00	.....	.....	.....	.....	.....
Champaigh	Champaign	1.99	5.49	4.54	3.86	8.55	9.93	2.44	4.87	2.06	5.53	2.37	2.21	53.84
Logan	Atlanta	.....	.....	.....	.....	.....	11.44	2.42	7.69	1.50	4.71	.....	.....	.....
Menard	Petersburg	.....	.....	.....	.....	.....	.....	2.79	.....	.....	.....	.....	.....	.....
Sangamon	Springfield	2.48	7.92	4.92	3.85	10.59	12.71	1.89	3.13	1.21	3.76	2.60	3.15	58.20
Morgan	Jacksonville	.....	.....	.....	.....	.....	.....	2.70	4.45	1.55	6.55	.36	.....	.....
Scott	Riggston	.....	.....	.....	.....	7.29	7.72	3.84	4.19	.....	.....	.....	.....	.....
Pike	Griggsville	*1.39	*3.90	*3.10	4.03	8.20	8.04	3.47	2.97	1.87	4.82	3.45	1.93	47.18
Christian	Pana	.....	.....	.....	.....	.....	.....	.....	3.68	.15	2.00	2.75	1.50	.....
Coles	Mattoon	2.00	9.00	6.10	4.42	6.95	5.94	2.07	5.94	1.70	3.00	2.75	2.26	52.13
Average		1.77	5.22	4.80	4.14	8.63	10.08	2.86	4.28	1.43	4.47	2.46	2.26	52.31
SOUTHERN DIVISION.														
Crawford	Palestine	.....	.....	.....	.....	.....	5.50	1.91	3.27	2.17	1.68	2.02	3.88	.....
Jasper	St. Marie	3.27	5.41	4.31	1.40	6.20	5.01	3.09	5.55	.....	.....	.....	.....	.....
Bond	Greenville	.....	.....	.....	...	2.96	9.45	3.68	.....	.....	.....	.....	.....	.....
Madison	Upper Alton	2.12	8.26	2.03	3.14	5.45	4.46	2.66	2.40	1.58	3.06	2.89	2.02	40.07
Marion	Centralia	3.00	6.05	5.17	1.65	4.73	9.66	3.97	5.74	2.45	7.25	1.75	*3.75	55.17
St. Clair	Mascoutah	3.50	7.25	5.00	2.65	4.75	5.81	5.12	2.37	4.25	3.66	5.74	2.37	52.47
White	Grayville	7.55	6.00	7.50	3.05	4.00	3.75	7.25	3.27	*2.84	*4.14	1.00	*3.75	54.10
Hamilton	McLeansboro	*2.99	*4.97	*3.22	2.86	6.27	3.93	3.06	7.35	3.99	2.82	2.77	2.60	46.83
Perry	Swanwick	2.21	7.17	3.96	1.29	6.68	3.22	4.00	3.42	3.26	3.73	.....	.....	.....
Saline	Harrisburg	.....	.....	.....	.....	.....	.....	.....	.....	3.90	.....	.....	.....	.....
Pope	Golconda	6.05	10.16	4.72	3.85	10.24	4.00	5.90	11.38	3.83	2.29	5.64	2.43	70.52
Johnson	Vienna	.....	.....	.....	.....	.....	.....	.....	3.95	3.81	2.82	.....	.....	.....
Union	Anna	4.39	8.17	4.52	4.09	9.77	3.04	3.09	4.19	3.47	2.06	6.04	2.97	55.80
Alexander	Cairo	6.35	10.14	4.22	4.14	10.22	3.34	5.25	3.46	3.28	2.57	5.96	2.65	61.78
Average		4.14	7.36	4.46	2.81	6.48	5.10	4.08	3.69	3.23	3.28	3.79	2.93	54.59
State average		2.41	4.80	4.47	3.75	6.70	7.58	3.55	4.20	2.04	3.85	2.64	2.33	48.95

* Estimated.

Precipitation at Stations in Illinois, 1883.

STATIONS.		January	February	March	April	May	June	July	August	September	October	November	December	Total
NORTHERN DIVISION.														
County.	*Postoffice.*													
McHenry	Marengo	2.18	4.61	.89	2.00	6.18	3.92	2.94	1.17	2.04	4.28	4.03	1.67	35.91
Ogle	Polo	1.58	3.43	.32	2.40	6.14	4.33	5.02	.97	1.61	5.42	4.03	1.56	36.81
DeKalb	Sycamore	2.15	4.44	.65	3.41	8.55	5.85	5.50	1.95	2.93	6.48	6.63	1.86	50.40
Cook	Chicago	1.74	4.74	.42	3.72	7.32	5.61	5.43	1.21	1.36	7.36	5.26	1.60	45.87
Whiteside	Morrison	1.64	5.08	.86	1.49	4.78	4.13	5.17	*3.03	1.26	*4.22	6.30	*2.07	40.03
Stark	Elmira	1.87	7.63	.57	4.14	4.31	3.54	4,19	....	....	....	....	.54	....
Warren	Monmouth	1.80	2.72	1.15	2.44	5.32	6.55	5.66	1.11	1.07	4.94	3.28	.95	36.99
Peoria	Peoria	1.31	4.14	.77	6.18	6 54	4.39	3.57	.57	2.93	3.57	4.19	1.37	39.53
Kane	Aurora	2.57	7.27	.61	3.75	7.23	3.56	3.07	.95	1.57	7.16	6.37	2.61	46.72
Lee	Prairieville	2.74	4.95	.72	2.25	7.01	4.81	5.00	1.56	3.00	5.03	5.95	2.43	45.45
Average		1.96	4.90	.70	3.18	6.34	4.67	4.55	1.39	1.97	5.38	5.11	1.67	41.97
CENTRAL DIVISION.														
McLean	Normal	3.27	....	1.43	7.67	....	....	....	....	....	....	....	....	....
Logan	Atlanta	1.50	5.50	.93	5.38	5.59	5.60	*3.97	1.11	2.19	3.63	*2.82	*2.50	40.72
Christian	Pana	1.28	4.50	1.00	2.00	4.31	3.15	5.75	1.50	.75	8.00	3.72	.82	36.78
Sangamon	Springfield	1.96	7.53	1.36	4.42	6.61	8.40	3.77	.95	1.06	6.08	3.48	3.17	48.79
Pike	Griggsville	1.38	6.01	1.48	5.48	6.60	8.80	2.77	2.37	1.21	7.52	3.78	1.57	48.97
Coles	Mattoon	.91	8.20	1.28	3.03	4.14	3.94	4.63	1.78	.80	9.40	4.73	2.26	45.11
Macoupin	Bunker Hill	1.17	7.42	1.47	4.33	3.80	....	....	6.02	81	3.14	3.71	1.96	....
Scott	Merritt	....	....	....	....	....	....	....	....	1.66	....	....	....	....
Average		1.64	6.53	1.28	4.61	5.17	5.98	4.18	2.29	1.21	6.29	3.71	2.04	44.07
SOUTHERN DIVISION.														
Crawford	Palestine	2.10	8.47	3.62	3.40	2.09	4.13	8.30	1.05	.32	7 58	7.45	4.05	53.46
Marion	Centralia	.82	10.35	3.66	4.65	3.15	8.47	6.95	*3.06	.74	8.55	7.20	1.65	59.25
Perry	Swanwick	1.41	6.66	3.27	4.64	3.16	6.38	5.24	3.22	.06	8.53	5.90	2.92	51.39
Hamilton	McLeansboro	2.30	8.27	3.31	3.19	5.20	9.13	3.14	2.54	....	9.28	6.64	3 50	56.50
Pope	Golconda	3.33	6.84	1 57	6.98	7.13	6.15	4.22	1.27	.71	6.65	8.66	4.66	57.17
Alexander	Cairo	2.74	8.52	2.15	5.64	3.85	7.11	7.95	1.73	.34	6.97	4.36	2.18	52.53
White	Grayville	2.50	....	1.00	....	....	....	....	....	....	....	....	....	....
St. Clair	Mascoutah	1.52	12.25	3.00	3.25	6.20	6.70	5.60	3 20	....	7.60	3.50	2.10	54.92
Union	Anna	2.25	8.19	3.93	5.75	6.64	8.21	2.86	4.02	.57	7.21	6.85	5.14	60.14
Bond	Greenville	1.00	4.50	3.66	5.05	6 25	4.21	7.50	3.52	.03	9.52	6.62	2.46	54.62
Average		2.00	8.23	2.92	4.73	4.85	6.61	5.75	2.72	.31	7.99	6.39	3.08	55.35
State average		1.87	6.55	1.63	4.17	5.45	5.75	4 83	2.13	1.16	6.55	5.07	2.26	47.13

*Estimated.

Precipitation at Stations in Illinois, 1884.

STATIONS.		January...	February ..	March......	April.......	May........	June	July........	August.....	September.	October....	November..	December..	Total.......
NORTHERN DIVISION.														
County.	*Postoffice.*													
Boone..........	Belvidere.........	1.07	.....	.....	....	.....	....	.....	....	....	....	.....	.....	.....
McHenry	Marengo..........	.80	2.20	1.51	2.83	2.56	4.22	4.19	3.36	4.34	3.85	1.79	3.28	34.93
Ogle...........	Polo...............	1.45	2.15	2.17	....	2.77	4.30	6.39	2.81	5.03	....	.....	.....	.....
DeKalb	Sycamore.........	.71	2.15	2.02	4.06	3.18	4.53	8.84	3.43	3.46	5.76	2.48	4.14	44.76
Cook	Chicago	1.39	3.27	5.16	3.05	1.53	2.11	3.71	2.55	2.29	3.59	1.80	4.21	34.66
Kane...........	Aurora............	1.14	3.72	2.30	2.59	2.26	2.18	6.33	2.48	2.42	5.61	1.91	4.57	37.51
Lee.............	Prairieville	1.30	2.75	2.03	1.89	4.50	3.35	10.60	4.06	5.80	6.24	2.54	5.56	50.62
Rock Island....	Rock Island......	.43	.54	1.35	...	4.91	....	.....	4.27	7.59	7.88	2.04	.....	.....
Warren	Monmouth........	1.06	1.16	3.01	1.48	3.79	5.05	4.06	2.91	....	...	.....	.....	.....
Peoria..........	Peoria.............	.70	3.18	2.17	2.62	5.50	3.87	3.67	4.13	5.76	4.80	2.19	3.21	41.80
Will	Wilton Centre....	....	....	.....	....	....	...	.....	.. ..	...	....	.....	4.84	.....
Whiteside......	Morrison..........	....	.....	.....	....	2.84	4.83	.....	....	....	....	.....	.....	.....
Average		1.00	2.36	2.41	2.64	3.38	3.83	5.97	3.33	4.59	5.39	2.11	4.26	40.71
CENTRAL DIVISION.														
Logan..........	Atlanta...........	.75	2.85	2.80	1.14	5.25	5.22	4.22	2.50	.42	3.51	*2.82	*2.50	33.98
Menard	Petersburg.......	.23	*3.90	1.85	.20	4.85	9.35	3.22	1.95	4.25	2.30	*2.82	*2.50	37.42
Sangamon.....	Springfield.	1.51	4.24	3.70	2.49	3.79	6.20	3.62	1.54	6.85	2.74	1.29	4.19	43.16
Pike............	Griggsville.......	.71	3.78	3.36	3.39	5.46	5.20	9.04	3.89	8.11	2.66	2.48	3.43	45.51
Christian	Pana..............	1.06	3.50	1.50	2.58	2.25	2.39	4.00	1.25	7.33	2.50	2.00	4.88	35.24
Coles...........	Mattoon	.90	5.44	2.75	3.56	4.90	6.88	3.65	2.20	4.70	2.80	1.83	5.45	45,06
Macoupin......	Bunker Hill.......	...	.....	.....	....	4.27	3.96	.....	2.56	7.19	....	.....	.....	.....
Average		.86	3.95	2.66	2.23	4.39	5.60	3.62	2.27	5.55	2.75	2.21	3.99	40.06
SOUTHERN DIVISION.														
Crawford	Palestine..........	1.90	4.40	1.79	3.10	5.38	5.09	3.34	1.75	5.29	1.40	2.27	5.84	41.55
Bond...........	Greenville.........	2.10	8.90	*3.22	4.16	7.89	8.15	6.82	4.16	6.14	5.00	2.38	7.62	66.54
St. Clair........	Mascoutah	1.42	6.70	5.60	5.30	7.70	5.50	1.40	1.60	3.80	1.60	3.40	6.90	49.92
Marion..........	Centralia..........	.85	4.42	2.10	2.12	3.37	5.90	3.25	3.20	4.67	1.05	1.03	5.50	37,46
Perry...........	Swanwick.........	1.15	6.18	2.75	2.12	4.84	5.66	1.90	.95	2.85	1.00	1.60	5.78	36.78
Hamilton.......	McLeansboro....	1.97	3.87	2.55	2.96	2.80	5.27	1.78	2.70	3.80	1.92	1.88	8.24	39.74
Union..........	Anna..............	2.01	5.38	4.05	3.80	4.99	7.55	5.49	2.65	3.33	1.42	2.58	9.57	52.82
Pope...........	Golconda.........	2.12	6.61	4.04	4.95	4.74	7.52	5.49	.49	5.02	3.46	2.07	8.15	54.66
Alexander.....	Cairo	2,32	5.58	4.20	3.65	4.57	2.95	7.34	2.74	5.02	1.89	2.41	8.99	51.66
Madison........	Collinsville.......	....	.....	.....	....	4.21	3.73	2.21	1.82	3.66	1.64	2.16	5.68	.....
Average		1.76	5.78	3.37	3.57	5.05	5.73	3.90	2.21	4.36	2.04	2.08	7.23	47.90
State average..............		1.21	4.03	2.81	2.81	4.27	5.05	4.50	2.60	4.83	3.39	2.13	5.46	42.89

*Estimated.

Summary of Precipitation in Illinois.

STATIONS.		1878.	1879.	1880.	1881.	1882.	1883.	1884.	Average.
NORTHERN DIVISION.									
County.	*Postoffice.*								
McHenry	Marengo,	32.44	32.32	33.30	47.22	35.36	35.91	34.93	35.93
Winnebago	Durand.,	......	33.32	44.89	......	......	......	......	39.11
Winnebago	Rockford	......	......	......	44.21	......	......	......	44.21
Boone	Belvidere	......	35.36	45.35	......	......	......	......	40.36
Cook	Chicago	......	30.41	37.10	44.18	41.34	45.87	34.66	38.93
Kane	Elgin	......	32.15	41.39	......	......	......	......	36.77
Kane	Aurora	......	......	......	......	......	46.72	37.51	42.12
DeKalb	Sycamore	......	......	......	......	44.03	50.40	44.76	46.40
Ogle	Polo	......	......	......	......	......	36.81	......	36.81
Lee	Prairieville	......	......	......	48.42	42.06	45.45	50.62	46.64
Whiteside	Morrison	......	......	......	41.39	37.42	40.03	......	39.61
Putnam	Hennepin	32.15	......	......	......	......	......	......	32.15
Henry	Geneseo	33.90	30.00	38.50	40.50	......	......	......	35.73
Rock Island	Davenport (Iowa)	......	33.89	42.73	37.28	.....	......	......	37.97
Stark	Elmira	30.16	25.66	30.97	36.19	37.06	......	......	32.01
Peoria	Peoria	31,46	28.79	39.89	41.05	41.49	39.53	41.80	37.74
Warren	Monmouth	......	......	......	44.10	40.91	36.99	.....	40.67
Average		32.02	31.34	39.35	42.45	39.96	41.97	40.71	....
CENTRAL DIVISION.									
Hancock	Augusta	35.60	28.88	33.70	......	......	......	......	32.73
Hancock	Keokuk (Iowa)	......	22.51	34.54	39.01	.....	......	......	32.02
Fulton	Canton	......	......	....	46.02	50.22	......	......	48.12
McDonough	Prairie City	......	......	......	46.55	......	......	......	46.55
Champaign	Champaign	......	......	......	49.39	53.84	......	......	51.62
Brown	Mt. Sterling	45.86	21.70	30.52	......	......	......	......	32.69
Logan	Atlanta	......	......	......	......	......	40.72	33.98	37.35
Menard	Petersburg	......	......	......	......	......	......	37.42	37.42
Sangamon	Springfield		......	30 93	56.51	58.20	48.79	43.16	47.52
Pike	Griggsville	......	......	......	......	47.18	48.97	45.51	47.22
Christian	Pana	......	......	......	......	......	36.78	35.24	36.01
Coles	Mattoon	......	......	......	......	52.13	45.11	45.06	47.43
Average		40.73	24.36	32.42	47.50	52.31	44.07	40.06	....
SOUTHERN DIVISION.									
Crawford	Palestine	......	......	......	......	......	53.46	41.55	47.51
Jasper	St. Marie	......	30.07	39.03	......	......	......	......	34.55
Bond	Greenville	......	......	......	......	......	54.62	66.54	60.58
Madison	Upper Alton	......	32.93	31.41	44.42	40.07	......	......	37.21
Clay	Louisville	46.64	41.60	42.44	......	......	......	......	43.56
Marion	Centralia	......	......	40.70	35.42	55.17	59.25	37.46	45.60
St. Clair	St. Louis, (Mo)	......	25.70	34.56	37.37	......	......	......	32.54
St. Clair	Mascoutah	......	......	......	......	52.47	54.91	49.92	52.44
White	Grayville	......	......	51.33	43.71	54.10	.....	......	49.51
Hamilton	McLeansboro	......	......	......	......	46.83	56.50	39.74	44.36
Perry	Swanwick	......	......	......	......	......	51.39	36.78	44.09
Pope	Golconda	......	54.84	56.17	41.09	70.52	57.17	54.66	55.74
Union	Anna	......	......	......	37.40	55.80	60.14	52.82	51.54
Saline	Riley	......	......	......	47.22	......	......	......	47.22
Alexander	Cairo	......	45.31	49.56	32.13	61.78	52.53	51.66	48.83
Average		46.64	38.41	43.14	39.84	54.59	55.35	47.90	....
State average		39.80	31.37	38.30	43.26	48.95	47.13	42.89	....

MINUTES OF THE FINAL SESSION OF THE ILLINOIS STATE BOARD OF AGRICULTURE, ELECTED FOR 1883-1884.

Department of Agriculture,
Springfield, January 6, 1885.

Tuesday—10 o'clock A. M.

Board met in regular annual session.

President Landrigan in the chair.

Present: President Landrigan, Ex-President Scott, Vice-Presidents Pearce, Reynolds, Griffith, Haskell, Dysart, Lewis, Vittum, Jr, David, Rush, Funk, Chester, Skeavington, Gore, Gillham, Pullen and Washburn.

The Secretary made his annual report which was received and ordered published in the proceedings. (Report in appendix.)

The following reports of standing committees were received, approved and ordered published in the proceedings.

COMMITTEE OF ARRANGEMENTS.

To the State Board of Agriculture:

The Committees of Arrangements for the Fair and Fat-Stock Show, have had no meetings during the past year. The arrangements for these exhibitions, as will be seen by the record, were completed at the extra meetings of the Board.

JOHN LANDRIGAN,
Chairman.

REPORT OF PRINTING COMMITTEE.

To the State Board of Agriculture:

The expenses incurred for printing during the past year have been as follows:

Department	$1,640 43
State Fair	1,566 86
Fat-Stock Show	1,049 45
Total	$4,256 74

The items making up the above amounts are as follows.

Respectfully submitted.

SAMUEL DYSART.
S. D. FISHER,
Committee.

T. W. S. KIDD, SPRINGFIELD.

December crop report, 1883	$525 25
April crop report	123 75
May crop report	146 75
June crop report	131 25
July crop report	169 50
August crop report	312 75
Railroad labels, State Fair	8 15
Total	$1,417 40

H. W. ROKKER, SPRINGFIELD.

December crop blanks, 1883	$11 00
April crop blanks	11 00
May crop blanks	11 00
July crop blanks	11 00
August crop blanks	11 00
Extra meteorological tables	1 50
Printing crop slips	7 00
Printing list of counties	4 00
Printing rules and by-laws	28 25
Printing Entomologist's slips	11 00
Printing slips Fair and Fat-Stock Premium lists	9 00
Making changes in Premium list	5 50
Entry books, State Fair	40 00
Check books, State Fair	5 00
Report Fat-Stock Show, 1883	150 50
Arrangements Fat-Stock Show	2 50
Entry books, Fat-Stock Show	15 00
Check and certificate books, Fat-Stock Show	8 50
Printing and stationery	219 35
Total	$562 10

SPRINGFIELD JOURNAL COMPANY.

Printing crop slips	$9 00
Roster cards	8 00
June crop blanks	7 25
Entry applications	17 25
Entry and stall cards	10 00
Voting tickets	3 50
Committee report blanks	7 00
Cost of production blanks	10 00
Measurement blanks	3 00
Speed premium blanks	8 50
Pedigree blanks	3 00
Speed programmes	5 50
Delegates blanks	3 25
Call for Stockmen's Convention	2 75
150 copies Daily Journal	6 00
Printing and stationery	23 75
Total	$127 75

STATE REGISTER CO., SPRINGFIELD.

Entry blanks	$23 00
Entry cards	23 70
Crop report slips	4 00
Fat-Stock Show slips	6 00
List of Illinois Dairies	7 50
Press circulars	3 00
Tile circulars	5 00
Printing and stationery	1 50
Total	$73 70

J. B. BROWN, SPRINGFIELD.

Printing and stationery	$36 78

FRANK SIMMONS, SPRINGFIELD.

Stationery	$3 00

J. M. W. JONES PRINTING AND STATIONERY CO., CHICAGO.

Season, admission and childrens' tickets, Fat-Stock Show	$226 50
Complimentary tickets, Fat-Stock Show	33 00
Check book, notice cards, badges, etc	24 54
Printing and stationery	348 25
Total	$632 29

JNO. B. JEFFERY PRINTING CO., CHICAGO.

Posters, Fat-Stock Show	$362 45

JAMESON & MORSE, CHICAGO.

Catalogues, Fat-Stock Show	$254 50

S. D. CHILDS & CO., CHICAGO.

Steel discs for badges	$100 00
Badges	125 00
Total	$225 00

WESTERN BANK NOTE AND ENGRAVING CO., CHICAGO.

Engraving steel plate and printing tickets	$100 00

RAND, M'NALLY & CO., CHICAGO.

Electrotype, Fat-Stock Show	$42 50

ROUNDS & SON, CHICAGO.

Badges	$15 00

W. J. JEFFERSON, CHICAGO.

Printing and stationery	$6 45

AMERICAN POULTRY JOURNAL, CHICAGO.

Score cards	$4 50

S. HOLDERNESS & CO., CHICAGO.

Changing Fair and Fat-Stock Show stamps	$2 00

J. C. DUNNING, CHICAGO.

Stationery	$1 50

A. D. WEBB, FRANKLIN GROVE.

Children's and Teachers' tickets, State Fair	$339 82
Children's tickets, Fat-Stock Show	50 00
Total	$389 82
Grand total	$4,256 74

REPORT OF COMMITTEE ON CROP REPORTS.

To the State Board of Agriculture:

The Committee on Crop Statistics beg leave to report that there is an increasing demand for information concerning the growing and harvested crops, that can be best supplied by the crop reports of this Board. The character of these reports has been much improved from year to year, and the increasing interest in this work among assessors and correspondents, insures much more satisfactory results each succeeding year. The committee recommend the same form of blank for the collection of Agricultural Statistics by assessors as has been used heretofore.

Respectfully submitted.

D. GORE,
E. B. DAVID,
JOS. SKEAVINGTON,
S. D. FISHER,
Committee.

REPORT OF COMMITTEE ON MUSEUM.

To the State Board of Agriculture:

The Committee on Museum has held two meetings during the past year, the minutes of which are submitted as a part of this report.

The work planned at the beginning of the year has been carried out as far as possible, but unavoidable delays have occurred which rendered it impossible to complete the work. Nevertheless, great improvements have been made in the Museum, both in its appearance and usefulness.

The most marked improvement made during the year has been the painting of the walls and ceiling to correspond with the other rooms of the Department.

The walls are now a warm grey, restful and pleasant to the eye, while the ceiling is painted in polychrome in soft colors, which harmonize with the walls and wood-work, and renders the whole one of the handsomest rooms in the State Capitol.

A large number of additions have been made to the exhibit, prominent among which are the casts of Illinois fruits and the specimens of domestic fowls. A list of the additions to the Museum during the year is appended, and the Committee acknowledges with pleasure the contributions from friends of the Museum.

Much still remains to be done to make this division of the Agricultural Department as instructive and interesting as it should be, and the Committee would respectfully ask for the full co-operation of other members of the Board in this work.

D. B. GILLHAM,
GEO. S. HASKELL,
Committee.

MINUTES OF MEETINGS OF COMMITTEE ON MUSEUM.

AGRICULTURAL MUSEUM, February 15, 1884—9 o'clock A. M.

Pursuant to call of the Chairman the Museum Committee met in the office of the Museum at 9 o'clock A. M.

Present: Chairman Gillham, Messrs. Haskell and Savage, and Miss DuBois.

Motion of Mr. Haskell carried, that the Curator be empowered to employ a janitor for the Museum at one hundred dollars ($100) per year, or less.

The Curator was instructed to have the Museum thoroughly cleaned, cases washed and a rearrangement of articles made.

It was decided to have the walls and ceiling of the Museum painted, the floor oiled and the cases varnished. Bid of Mr. James P. Bryce, for five hundred and forty-four dollars ($544), for this work, accepted.

Committee adjourned.

D. B. GILLHAM, *Chairman.*

AGNES E. DUBOIS, *Secretary.*

AGRICULTURAL MUSEUM, September 23, 1884—2 o'clock P. M.

Committee met pursuant to call of the Chairman.

Present: Chairman Gillham, Mr. Haskell and Miss DuBois.

The special business of the meeting being to receive the birds furnished and mounted by Mr. C. W. Butler, Mr. Butler was called before the Committee, and stated that he had been unable to procure all of the birds mentioned in the contract.

Motion of Mr. Haskell carried, that the Committee accept the birds already prepared, and that Mr. Butler be instructed to furnish the other birds named in the contract as early as possible.

Motion of Mr. Gillham carried, that Mr. Butler be paid two hundred and thirty-two and $^{50}/_{100}$ dollars ($232.50), for the birds on hand, and three dollars ($3) per day for two days work in arranging them in the cases.

Motion Miss DuBois carried, that new matting be purchased for the east aisle of the Museum.

Mr. Gillham stated that the exhibit of glassware of Illinois manufacture which he was to procure, would be ready for shipment in about six weeks.

Mr. Haskell stated that the exhibit of seed would be shipped in a short time.

Committee adjourned subject to call of the Chairman.

D. B. GILLHAM, *Chairman.*

AGNES E. DUBOIS, *Secretary.*

List of additions to Agricultural Museum during the year 1884:

Name.	Contributor.	Locality.
Peat from Scotland	J. E. Woods	Springfield
Irish moss	" "	"
Licorice pea	Oscar Stafford	Florida
Silk cocoons	Misses Kirkpatrick	Old Berlin
Model of wind mill	Sandwich Mfg. Co.	Sandwich
" "	U. S. Wind Engine & Pump Co.	Batavia
Model of mower	Jno. P. Manny Mower Co.	Rockford

WAX CASTS OF APPLES.

Name.	Grown By.	Locality.
Bailey Sweet	Jas. T. Johnson	Warsaw
Ben Davis	" "	"
Dominie	" "	"
Hyslop crab	" "	"
Jonathan	" "	"
Maiden's Blush	" "	"
Northern Spy	" "	"
Ortley	" "	"
Rambo	" "	"
Rawle's Genetting	" "	"
Rome Beauty	" "	"
Smoke House	" "	"
Willow Twig	" "	"
Broadwell	Ed. P. Johnson	"
Fall Harvey	" "	"
Westfield's Seek-no-further	" "	"
Yellow Bellflower	" "	"
Yellow Ingestrie	" "	"
Baldwin	A. C. Hammond	"
Benoni	" "	"
Duchess of Oldenburg	" "	"
Fall Orange	" "	"
Fulton Strawberry	" "	"
Jersey Black	" "	"
Monte Bello	" "	"
Norton's Melon	" "	"
Red Winter Sweet	" "	"
Smith's Cider	" "	"
Sweet Bellflower	" "	"
Wagener	" "	"
White Winter Pippin	" "	"
Wythe	" "	"
Vandiver Pippin	S. J. Hammond	"
Bethlehemite	T. J. Blake	"
Grimes' Golden	A. H. & G. B. Worthen	"
Summer Pearmain	" " " "	"
Pennock	T. A. Worthen	"
Henwood	Jno. Thompson	"
Holland Pippin	E. McCune	"
King of Tompkins Co	W. S. Worthington	"
Mother	I. Bliss	"
Pear Apple	Jno. Peyton	"
Pound Royal	Wm. Gray	"
Pryors' Red	John Bricker	"
Queen Apple	B. W. Nicely	"
Roman Stem	G. P. Walker	"
Roxbury Russet	Wilson Kiser	"
Swiss Reinette	Jules Charpentier	"
Saint Lucie	" "	"
Tulpahocken	Lewis Lively	"
Wabash Bellflower	A. Goodwin	"
Capps' Mammouth Pippin	Mrs. J. Nearing	Kenney
Fulton	G. H. Baker	Cobden
Haas	C. N. Dennis	Hamilton
Fall Swaar	E. Dunlap	Champaign
Pound Sweet	"	"
Ramsdell Sweet	"	"
Alexander		
Colvert		
Davis		
Stanard		
Transcendent Crab		

CONTRIBUTIONS.

Articles.	Given By.	Locality.
Sample coal	Lathrop Coal & Mining Co	Kewanee
"	John Moule	Belleville
" (3 pieces)		Kickapoo
"	Shaft H	Braidwood
"	Shaft I	"
"		Streator
"	Taylor Williams	Rapid City
" (2 pieces, Bryden Coal	Carbondale Coal and Coke Co	Carterville
" (Bessemer Lump Coal)	Carbondale Coal and Coke Co	"
"		Percy
"	Chapman & Little	Peoria
"	No. 2 Lower Vein	Bloomington
"	No. 3 Upper Vein	"
No. 2 yellow corn	Merchants' Exchange	St. Louis, Mo
No. 2 mixed corn	" "	"
No. 2 white Minnesota	" "	"
St. Charles corn	" "	"
No. 2 Spring wheat	" "	"
No. 3 Spring wheat	" "	"
No. 2 red Winter wheat	" "	"
No. 3 red Winter wheat	" "	"
No. 4 Winter wheat	" "	"
No. 2 Turkey wheat	" "	"
No. 2 Mediteranean wheat	" "	"
No. 3 Mediteranean wheat	" "	"
No. 2 oats	" "	"
No. 2 white oats	" "	"
No. 2 rye	" "	"
Alfalfa	James Shinn	Lone Pine, Washington Ty
Red clover	"	" "
White clover	"	" "
Timothy	"	" "
German Millet	"	" "
Hungarian grass	"	" "
Orchard grass	"	" "
Buckwheat	"	" "
White Russian oats	"	" "
Side or lop oats	"	" "
Fall rye	"	" "
Spring rye	"	" "
Bearded barley	"	" "
Beardless barley	"	" "
Blue stem wheat	"	" "
Red chaff Minnesota wheat	"	" "
Chili club wheat	"	" "
Little club wheat	"	" "
Sonora wheat	"	" "
Russian wheat	"	" "
Tennessee wheat	"	" "
Scotch-fife wheat	"	" "
Alaska wheat	"	" "
British Columbia wheat	"	" "
Twin ears of corn	A. C. Gish	Virden
7 ears corn in one shuck	B. Kennedy	Alton
Cheat in head of wheat	Wm. Digman	Madison Co
Sea-weed		Brighton, England
Cactus	W. A. Knock	White Oak
Rooster spur	N. Affonso	Springfield
Plymouth rock eggs	W. Lee Capps	"
Oxford down—Spanish-Merino Wool 3 samples	J. W. Dalby	"
French Merino—Cotswold wool	"	"
Pair Pea-comb Partridge Cochin Fowls	"	"
Pair White Cochins	"	"
Pair Plymouth Rock	"	"
Pair Black Spanish	"	"
Pair Brown Leghorn	"	"
Pair Golden-pencilled Hamburg	"	"
Pair White Crested Black Polish	"	"
Pair Bearded Silver Polish	"	"
Pair Houdan	"	"
Pair Duck-wing Game Bantam	"	"
Pair Pea-fowls	"	"
Pair White Guinea Fowls	"	"
Pair White Holland Turkeys	"	"
Pair Toulouse Geese	"	"

CONTRIBUTIONS—*Continued.*

Articles.	Given By.	Locality.
Pair Dun Barb Pigeons	J. W. Dalby	Springfield
Pair Black Barb Pigeons	"	"
Pair Red Jacobin Pigeons	"	"
Pair White Jacobin Pigeons	"	"
Pair Red-winged Turbit Pigeons	"	"
Pair White Angora Rabbits	"	"
Jack Rabbit, male		Kansas

REPORT OF LIBRARY COMMITTEE.

To the State Board of Agriculture:

The additions to the Library during the past year are named in the following list which includes the exchanges as well as the books purchased.

The Committee has expended during the past year three hundred and thirteen dollars and sixty-seven cents ($313.67).

It is recommended that the magazines and similar publications of value for reference be bound and catalogued and made part of the Library.

Respectfully submitted,

GEO. S. HASKELL,
A. C. RUSH,
S. D. FISHER,
Committee.

BOOKS PURCHASED IN 1884.

HERD AND STUD.

American Berkshire Record, vol. 6.
American Hereford Record, Vol. 2.
American Jersey Herd Book, Vols. 5 and 9.
American Jersey Herd Register, Vols 14 and 15.
American Jersey Cattle Club Register, Vol. 26.
American Short-Horn Herd Book, Vol. 26.
American Stud Book, Vol. 4.
American Oxford-down Record, Vols. 1 and 2.
Breeders' Trotting Stud Book — Supplement.
Clydesdale Stud Book, Vol. 6.
Dutch-Friesian Assn. Herd Book.
English Cart-Horse Society, Vols. 1-5.
English Cart-Horse Society (Pamphlet).
Holstein Herd Book, Vol. 7.
National Register of Norman Horses, Vol. 2.
Percheron Stud Book, Vol. 3.
Stud Book, Percheron de France.
U. S. Merino Sheep Register.

MISCELLANEOUS.

American Encyclopædia—Index.
American Farmers' Encyclopædia.
American School of Classical Studies at Athens (Pamphlet).
Ammonia, Chlorine, etc. (Pamphlet).
Animals Fed and Slaughtered as Human Food (Pamphlet).
Annual Encyclopædia—New Series, Vol. 8—1883.
Butter Tests of Jersey Cows.
Cabbages, How to Grow Them.
Cornell University Register, 1883 and 1884.
Culture of the Grape.
Drainage of Towns and Buildings.
Elements of Agricultural Chemistry.
European Agricultural and Rural Economy, 2 vols. (Pamphlet).
Farm Drainage.
Feeding Animals.
Hand Book of the Sulphur Cure.
Harris on the Pig.
Milk Cows and Dairy Farming.
Nitrogen as Nitric Acid (Pamphlet).
Onion Raising, etc. (Pamphlet).
Peach Culture.
Pear Culture for Profit.
Practical Agriculture.
Report on the Rocky Mountain Locust and Other Insects.
Two Thousand a Year on Fruit and Flowers.
Properties of Plants and Flowers.

BOOKS RECEIVED IN EXCHANGE, 1884.

Connecticut.

Report State Board Agriculture and Experimental Station, 1883.

Indiana.

Report State Agricultural Society, 1883, 10 copies.

Iowa.

Proceedings of the Tenth Annual Meeting of the Iowa State I. S. B. Association, 1883.
Annual Report Iowa Agricultural Society, 1883, 10 copies.

Maine.

Agricultural Reports, 10 copies.

Massachusetts.

Catalogue of Massachusetts Horticultural Library.
Journal of Proceedings.
Massachusetts Constitution and By-laws.
Mass. Horticultural Society, 1864–77.
Report 20th Annual Exhibitions of the Mass. Horticultural Society.
Schedule of Prizes Mass. Horticultural Society, 7 copies.
Trans. of the Essex Agrl. Society, 4 vols.
Trans. of the Mass. Hort. Society, 1852.
Trans. of the Mass. Hort. Society, 1883.
Trans. of the Worcester Hort. Society, 1883.

Michigan.

Proceedings Sanitary Convention, 1882.
Public Health Laws.
Pamphlets (2) on Scarlet Fever.
Pamphlet on Health Office.
Report State Hort. Society, 1883, 10 copies.
Report State Board of Health, 1883.
Report Sanitary Convention, Reed City, 1883, 2 pamphlets.
Report of Secretary of State.

New York.

Annual Report New York Produce Exchange, 1883–84.
43d Annual Report of the State Agricultural Society, 1883.

North Carolina.

Report of the Agricultural Experimental Station, 1883.
Trans. State Agrl. Society, 1877–82, 12 vols.

Ohio.

Agricultural Experiment Station—Bulletin No. 1 (Pamphlet).
Board of Trustees, State University, 1883.
Catalogue State University, 1882–83.
Meteorological Bureau, 1883.
State Agrl. Report 1883, 20 copies.
State Forestry Association.

Washington.

Annual Report Foreign Commerce of the U. S., ending June 30, 1884.
Circular Bureau of Education, Nos. 1, 3 and 4, (Pamphlets).
Circulars of Information, Bureau of Education, Nos. 4 and 5, 1884.
Fruit Culture in the Several Countries, June, 1884.
Quarterly Report Chief Bureau of Statistics Treasury Department, 1883, Nos. 2 and 3.
Report Chief Signal Service Officer, Parts 1 and 2, 1882, (2 copies each).
Report Commissioner of Education, 1882–83.
Report Dept. of Agriculture, 1883.
Reports from Consuls U. S , Nos. 41, 42, 43, 44, May, June, July and August, 1884.
U. S. Geological Survey.

Foreign.

Annual Report Agrl. and Arts Association, Ontario, 1882–83 (Pamphlet).
Annual Report on Agriculture and Arts, Ontario, 1883, Vols. 1 and 2.
Annual Report Bureau of Industries, Ontario, 1883, 2 copies.
Bulletine No. 8 and No. 1, Paris.
Bulletine Ministre Agrl. de Paris, Nos. 2 and 3.
Manitoba Gazette.
Manitoba Municipal Act of 1884, (Pamphlet).
Ninth Annual Report of the Montreal Hort. Society, 1883.
Statutes of Manitoba (6 and 47 Victoria) 1883, Vol. 1.
Statutes of Manitoba, Winnepeg, 1884.

The following is the list of periodicals received during the year:

Name of Paper.	Location.
American Brewers' Gazette	New York
American Engineer	Chicago
American Poultry Journal	Chicago
Bloomington Pantagraph	Bloomington, Ill.
Bradstreet's	New York
Breeders' Gazette	Chicago
Breeders' Journal	Beecher, Ill
Chicago Journal of Commerce	Chicago
Cincinnati Price Current	Cincinnati
Coleman's Rural World	St. Louis
Dakota Farmer	Huron, Dakota
Drainage and Farm Journal	Indianapolis, Ind
Farmers Review'	Chicago
German Agricultural and Horticultural Journal	Wilwaukee, Wis
Indiana Farmer	Indianapolis, Ind
Industrial World and Iron-Worker	Chicago
Iowa Homestead	DesMoines, Ia
Jonesboro Gazette	Jonesboro, Ill

List of Periodicals—Continued.

Name of Paper.	Location.
Kansas City Live-Stock Record	Kansas City
Kentucky Live-Stock Record	Lexington, Ky
Lanark Gazette	Lanark, Ill
Legal Adviser	Chicago
National Live-Stock Journal	Chicago
National Stockman	Pittsburgh, Pa
Northwestern Farmer	Fargo, Dakota
Prairie Farmer	Chicago
Rural New Yorker	New York
Spirit of the Turf	Chicago
The Cultivator and Country Gentleman	Albany, N. Y
The Farmer and Fruit Grower	Anna, Ill
Turf, Field and Farm	New York
U. S. Miller	Milwaukee, Wis
Weekly Drovers' Journal	Chicago
Western Agriculturist	Quincy
Western Rural	Chicago
Whitehall Republican	Whitehall, Ill
FOREIGN.	
Canadian Breeder and Agricultural Review	Toronto, Canada
Field, Farm and Garden	London, England
Manitoba Gazette	Winnipeg, Canada
Mark Lane Express	London, England
North British Agriculturist	Edinburgh, Scotland

REPORT OF THE COMMITEE ON TRANSPORTATION.

To the Illinois State Board of Agriculture:

The Committee on Transportation take pleasure in reporting that the railroad companies have made liberal concessions in the matter of freight and passenger transportation at the late Fair and Fat-Stock Show, and recommend the adoption of the following resolutions:

Resolved, That the thanks of the Illinois State Board of Agriculture are due and are hereby tendered the railroads named below for the substantial aid rendered the agricultural interests of the State in making liberal reductions in passenger and freight rates to visitors and exhibitors attending the Illinois State Fair and the American Fat-Stock Show of 1884.

Resolved, That the Secretary is hereby instructed to send a copy of the resolution to the managers of the railroads who have thus co-operated with the Board in making the Fair and Fat-Stock Show of benefit to the greatest number.

Respectfully submitted,

JOHN LANDRIGAN,
D. W. VITTUM, JR.,
J. W. JUDY,
J. GRIFFITH,
S. D. FISHER,
Committee.

RAILROAD ARRANGEMENTS, STATE FAIR, 1884.

Chicago & Alton
[1]Chicago, Rock Island & Pacific
[1]Chicago, Burlington & Quincy
[2]Chicago & Northwestern
Chicago & Eastern Illinois
Chicago & Iowa
[1]Illinois Central
[3]Wabash, St. Louis & Pacific
Louisville, New Albany & Chicago
[2]Chicago, Milwaukee & St. Paul
§Cincin., Indianapolis, St. L. & Chicago
Chicago, St. Louis & Western
[4]Peoria, Decatur & Evansville

*Passengers, one and one-third fare for the round trip. Freight will be charged full fare to Chicago, and must be prepaid, when it will be returned free to points on this line whence shipped, on certificate of the Secretary that the same has been on exhibition, and has not changed ownership.

*Passenger Arrangements cover points in Illinois only, unless otherwise stated.

Baltimore & Ohio
Chicago & Atlantic
Chicago & Grand Trunk
Chicago, St. Louis & Pittsburgh
Lake Shore & Michigan Southern
Michigan Central
New York, Chicago & St. Louis
Pittsburgh, Ft. Wayne & Chicago

Passengers, one fare for the round trip (distance limited to 175 miles). Freight will be charged full local tariff rates to Chicago, and returned free to points on this line whence shipped, on certificate of the Secretary that the same has been on exhibition, and has not changed ownership. Freight arrangement covers a distance of 275 miles East of Chicago.

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[1] Freight arrangement covers points in Illinois and Iowa.

[2] Freight arrangement covers points in Illinois, Iowa, Wisconsin, Minnesota and Dakota.

[3] Freight arrangement covers all points on its line.

[4] Freight arrangement covers only points south of Mattoon.

§Passenger rate is from Lafayette and stations north. Freight rule applies to all points on the line.

Freight should be prepaid at the station whence shipped, and a receipted bill taken for the same, which should be certified by the Secretary, on the grounds, as early as Thursday of the Fair.

TERMINAL FREIGHT CHARGES.

Freight for the Fair should be billed to the State Fair Grounds, Chicago, care Chicago, Burlington and Quincy Railroad. The charges for transfer to and from the Fair Grounds will be $2.00 per car each way.

TERMINAL EXPRESS CHARGES.

Brink's Chicago City Express Co. will receive goods sent by any express company to Chicago to their care, and will deliver the same with dispatch, at the Fair Grounds, charging as follows: For packages or small boxes not exceeding 50 pounds weight, 25 cents; for barrels, trunks, boxes, sacks, or medium size crates, not exceeding 200 pounds, 50 cents; and bulkier articles at reasonable rates. Office 65 Washington street.

FACILITIES FOR REACHING THE GROUNDS.

The facilities for reaching the Fair Grounds from any part of the city are ample and rapid, and the cost of transportation low.

The Chicago, Burlington & Quincy Railroad will run trains to and from the Fair Grounds as follows: First train will leave the Union Depot, corner Madison and Canal streets, at 8:30 A. M., and run every half hour until evening. First train will leave the Fair Grounds at 9:15 A. M., and every half hour during the day until 6 P. M. Time from Union Depot to Fair Grounds, 35 minutes. Fare, 15 cents. These trains run direct to the Club House and Grand Stand.

The Chicago and Northwestern Road will stop all its trains near the Fair Grounds.

The Madison Street cars will convey passengers direct to the Entrance Gate.

The Randolph and Lake street cars will deliver passengers within three blocks of the Main Entrance Gate.

RAILROAD ARRANGEMENTS FOR THE AMERICAN FAT-STOCK SHOW, 1884

†Chicago & Northwestern	Will carry stock from stations on its line to Chicago at regular tariff rates, and refund one-third of the amount paid on presentation of Secretary's certificate that the stock has been on exhibition.
‡Chicago, Rock Island & Pacific	
‡Illinois Central	
*Chicago & Alton	
*Chicago, St. Louis & Western	
Chicago & Eastern Illinois	
†Chicago, Milwaukee & St. Paul	
Cincin., Indianapolis, St. L. & Chicago	
Louisville, New Albany & Chicago	
Wabash, St. Louis & Pacific	
§Chicago, Burlington & Quincy	
Baltimore & Ohio	Passengers, one and one-third fare for the round trip (distance limited to 100 miles). Freight will be charged full local tariff rate to Chicago, and must be prepaid, when it will be returned free to points whence shipped, on certificate of the Secretary that the same has been on exhibition, and has not changed ownership. Freight arrangement covers a distance of 275 miles east of Chicago.
Chicago & Atlantic	
Chicago & Grand Trunk	
Chicago, St. Louis & Pittsburg	
Lake Shore & Michigan Southern	
Michigan Central	
New York, Chicago & St. Louis	
Pittsburg, Ft. Wayne & Chicago	

Paid freight bills, with Secretary's certificate, should be presented to the railroads when applying for a rebate of freight.

These concessions are made upon the condition that the roads are released from any and all liability exceeding $50 per head, in case of injury by accident or otherwise while in transit, or while awaiting shipment or delivery at stations.

Stock over the Illinois Central Railroad will be delivered at the Exposition Building, and should be so billed.

Owners, or their agents, must accompany the stock, and be responsible for it, and its loading and unloading. All stock should be billed prepaid. The five dollars switching charges will be collected of the owner of the stock at the Exposition Building.

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* Arrangement covers points in Illinois only.
† Covers points in Illinois, Iowa, Wisconsin, Minnesota and Dakota.
‡ Covers points in Illinois and Iowa.
§ Covers points in Iowa only.

TERMINAL CHARGES.

Stock from all other roads should be shipped to the Exposition Building, care Illinois Central Railroad, Union Stock Yards. The charge per car stock from the Stock Yards to the Exposition Building, and returning same, or empty car, to Stock Yards, will be five dollars.

The following reports of special committees were received and ordered spread upon the journal:

REPORT OF COMMITTEE TO THE INTERNATIONAL FAIR ASSOCIATION.

To the Illinois State Board of Agriculture:

GENTLEMEN: As a delegate to the annual convention of Fairs and Expositions at St. Louis, December 3 and 4, 1884, I wish to report that I was present from the opening to the close. The body, though not large, was composed of true representative men from the State, Provincial, District and County Fairs represented. The States represented were Illinois, Indiana, Missouri, Kansas and Wisconsin, and the Provinces of Quebec and Ontario, Canada.

There is no doubt but that the adoption of a resolution on the 5th day of June last, at the first meeting of this body, favoring the holding of a World's Fair commemorating the four hundredth anniversary of the discovery of America by Columbus, A. D. 1492, and recommending St. Louis as the place, had the effect of creating the impression in the minds of many that really the idea of a World's Fair was the chief object of the Association, and this prevented the attendance of representatives from many of the States and Territories. While it would be a matter to be deeply regretted if such prejudice had any foundation in fact, your delegate feels that he knows that such was not the case.

At the opening of the Convention I found myself the only one of your six delegates present, and but for the fortunate fact of the presence of Secretary Fisher and Chief Clerk Mills, I should have felt great reluctance in attempting to represent your body in the discussions and actions of the convention upon the most important issues of successful Fair management. The two gentlemen aided greatly in the conduct of the convention, in which body I succeeded in giving them seats, with an invitation to take part in the proceedings. On the second day your Superintendent of Gates and Tickets, Hon. Samuel Dysart, arrived, and at once entered upon his duties, remaining till the close of the labors of the convention.

The work of the convention from the beginning to the end was of deep and vital interest to all concerned in Fair and Exposition management, and can not fail to instruct and interest all persons in any wise connected with these institutions.

All the papers read before the convention were of the first order of merit, from the opening address of President Walsh, the resolutions and debates, down to the very able paper upon Fair Advertising by Festus J. Wade, Esq. Secretary of the St. Louis Fair Association, which, for its merit, was at once given to the Associated Press as worthy a place in the printed records of any body interested in these matters. In the judgment of your delegates present this paper will result in great good, in educating bodies of this character up to a higher plane in Fair management.

Your delegates regret that the limits of a report like this precludes the idea of giving you even a brief synopsis of the two days' earnest work by the convention, for which we must refer you, together with all others interested, to the printed proceedings.

The discussion of the interesting reports presented by the several committees contain much valuable information that should be in the hands of the managers of all the county and district fairs in the State, and the committee recommends that the proceedings of the convention be published in the Annual Report of the Department.

The action of your committee did not commit this Board to any line of policy, and the changes recommended by the Association will be presented when the rules and premium list are considered.

Respectfully submitted.

D. B. GILLHAM, *Chairman.*

REPORT OF COMMITTEE TO SOLICIT SUBSCRIPTIONS FOR THE FAT-STOCK SHOW.

To the State Board of Agriculture:

The committee appointed to solicit donations for the Fat-Stock Show beg leave to report as follows:

The following cash subscriptions were obtained in Chicago to the General Premium Fund of the Fat-Stock Show for 1884:

Union Stock Yards and Transit Co., John B. Sherman, Manager	$3,000
Grand Pacific Hotel, John B. Drake & Co., Proprietors	200
Sherman House, J. Irving Pierce, Proprietor	200
Palmer House, Palmer House Co., Proprietors	100
Leland Hotel, Warren F. Leland, Proprietor	25
Tremont House, John A. Rice & Co., Proprietors	25
Commercial Hotel, C. W. Dabb & Co., Proprietors	25
McCoy Hotel, William McCoy, Proprietor	15
Central House, 250 State street, W. E. Briggs, Proprietor	15
Crawford House, Adams and Wabash avenue, G. W. Babcock, Manager	15
Afton House, 73 and 75 Monroe street, C. A. Phillips, Proprietor	10
Windsor European Hotel, 145 Dearborn street, Samuel Gregston, Proprietor	10
Brevoort House, 143 Madison street, Benjamin & Wentworth, Proprietors	10
Benton House, Clark street, near Madison, Benton Mauzy, Proprietor	10
Hotel Cortland, Downey & Hibb, Proprietors	10
E. H. Lehman	25
L. Adams & Co	25

The following special premiums were obtained for the rings specified:

SPECIAL PREMIUMS—CLASS A—CATTLE.

LOT 6—GRADES OR CROSSES.

Best Steer or Spayed Heifer over 1 and under 2 years:

First prize given by the *Prairie Farmer*, cash	$25 00
Second prize, ten annual subscriptions, and a large map of the United States (mounted) with each subscription; the paper to be mailed postpaid to any address or addresses desired	20 00
Third prize, five annual subscriptions and map with each, as above	10 00

Best Steer or Spayed Heifer under 1 year:

Farmers' Review offers a cash prize of	30 00

LOT 8—ALL BREEDS AND GRADES BY AGES.

Best Steer, Barren or Spayed Cow 3 and under 4 years:

Coleman, Post & Reed, Proprietors, Ill. Agr'l Works, Springfield, offer one Post's combined cultivator, valued at.. $30 00

Best Steer or Spayed Heifer 2 and under 3 years:

Schuttler & Hotz, Chicago offer one Stock-feeder's Dump Wagon, with singletrees, doubletree and neck-yoke, all complete—made after entirely new plans, and especially adapted for the above purposes, valued at.............................. 125 00

Best Steer or Spayed Heifer 1 and under 2 years:

Furst and Bradley Manufacturing Co., Chicago, offer a Swing Beam Sulkey Plow, valued at.. 60 00

LOT 9—SWEEPSTAKES.

Best Animal shown in Lot 1—Short-Horns:

H. J. Whitcomb & Son, Chicago, offer one No. 8 White Sewing Machine, valued at.. $65 00

Best Animal shown in Lot 2—Herefords:

H. C. Staver & Co., Chicago, offer one improved Buckeye Feed-Grinder, with Horse-power combined, valued at 75 00

Best Animal shown in Lot 5—Holstein or Freisian:

C. D. Peacock, Chicago, (Jeweler,) offers a Water Pitcher and Tray, valued at 25 00

LOT 11—PEN OF CATTLE.

Best five Steers, Barren or Spayed Cows, 3 and under 4 years:

Marshall Field & Co., Chicago, cash prize...$125 00

Best five Steers or Spayed Heifers, 2 and under 3 years:

Marshall Field & Co., Chicago, cash prize 125 00

LOT 12—DRESSED CARCASS.

Best Carcass of Steer or Spayed Cow, 3 and under 4 years:

Fairbanks, Morse & Co., Chicago, offer one 4-ton Scale with Double Beam and Weigh Box, valued at..$170 00

Best Carcass of Steer or Spayed Heifer 1 and under 2 years.

W. W. Kimball, Chicago, offers one Cabinet Organ, valued at.......................... 150 00

THE ILLINOIS SHORT-HORN BREEDERS' ASSOCIATION

Agree to duplicate all premiums offered by the State Board of Agriculture and awarded Illinois exhibitors of thoroughbred Short-Horn cattle, shown at the Seventh Annual American Fat-Stock Show.

THE IOWA SHORT-HORN BREEDERS' ASSOCIATION

Agree to duplicate all premiums offered by the Illinois State Board of Agriculture and won by Iowa exhibitors of Short-Horns or Short-Horn grades, at the American Fat-Stock Show, Chicago, November, 1884.

THE IOWA STATE AGRICULTURAL SOCIETY

Agree to duplicate all premiums offered by the Illinois State Board of Agriculture at the Seventh Annual American Fat-Stock Show, and awarded to Iowa exhibitors.

THE AMERICAN HEREFORD ASSOCIATION

Agree to duplicate all premiums offered by the Illinois State Board of Agriculture and awarded Herefords or grade Herefords at the Seventh Annual Fat-Stock Show, to be held in Chicago, November, 1884.

THE HOLSTEIN BREEDERS' ASSOCIATION OF AMERICA

OFFER SPECIAL PREMIUMS AS FOLLOWS, FOR

PURE-BRED HOLSTEINS,

Exhibited at the Seventh American Fat-Stock Show.

Best Steer, Barren or Spayed Cow 3 and under 4 years	$30 00
Second best	20 00
Third best	10 00
Best Steer or Spayed Heifer 2 and under 3 years	30 00
Second best	20 00
Third best	10 00
Best Steer or Spayed Heifer 1 and under 2 years	30 00
Second best	20 00
Third best	10 00
Best Steer or Spayed Heifer under 1 year old	30 00
Second best	20 00
Third best	10 00
Best Holstein above ages	75 00

The Association offer two-thirds of the above premiums won by grade Holsteins having not less than 50 per cent. of Holstein blood and showing the characteristics of the breed.

CLASS C—SHEEP.

LOT 23—SWEEPSTAKES.

(Open to all.)

Best Wether 2 and under 3 years:

Coleman, Post & Reed, proprietors Illinois Agricultural Works, Springfield, offer one Post's Capital City Cultivator, valued at	$24 00

LOT 26—PEN OF WETHERS.

Best 5 fat Wethers 2 and under 3 years.

Marshall Field & Co., Chicago, cash prize	$125 00

CLASS D—SWINE.

LOT 37—SWEEPSTAKES.

(Open to all.)

Best Barrow 12 and under 18 months:

Farmers' Review, Chicago, Silver Cup, value $25 00

Best Barrow under 1 year:

Rice, Whitacre & Co., Chicago, a No. 2 Triumph Feed Steamer, valued at 60 00

LOT 40—PEN OF BARROWS.

Best 5 Fat Barrows 12 and under 18 months:

Marshall Field & Co., Chicago, cash prize $125 00

Best 5 Fat Barrows under 1 year:

Coleman, Post & Reed, proprietors Illinois Agricultural Works, Springfield, offer one of Post's Tongueless Cultivators, valued at.. 22 00

Respectfully submitted,

D. W. VITTUM, JR.
S. D. FISHER,
Committee.

REPORT OF COMMITTEE TO THE NATIONAL CATTLEMEN'S CONVENTION AT ST. LOUIS, MO.

To the State Board of Agriculture:

GENTLEMEN: As your delegate to the National Cattlemen's Convention held at St. Louis, November 17 to 23, 1884, I have the honor to report that owing to duties connected with our annual Fat-Stock Show that convened in the city of Chicago just prior to the Convention, I did not arrive in St. Louis until the third day of the Convention, but was there in time to witness the installation of the permanent officers. When I arrived in the city I soon learned that the Convention was not intended to be a truly national convention, but rather a convention of western and southwestern ranchmen, and that the committee on credentials had rejected the credentials of delegates from Boards of Agriculture and similar bodies, but that committee's recommendation had been overruled by the Convention proper, and I, with others representing similar bodies, was admitted.

This movement on the part of the committee on credentials had its effect, however, and threw a damper over that class of delegates, from which they were slow to recover, as it was easily discovered that the object of the meeting was more in the interest of obtaining from the Government a great national trail from the Rio Grande to the British possessions in the North, and getting control of Government lands for grazing purposes, than what was the great desire of the cattle growing interests east of the Mississippi River, viz: Legislation by Congress for relief of and protection from exotic diseases.

Your delegation found from the discussions that the *trail interest*, the *public land interest* and a very general desire on the part of a majority of the Convention to have a *close watch placed upon the Indian tribes of the plains*, who had troubled their grazing operations somewhat, were the all-absorbing interests of the Convention, and learned, from the action of the committee on credentials and the mode of procedure of the Convention, connected with an utter unwillingness to unite the National Cattlemen's Convention that had just closed its second session in the city of Chicago with that of St. Louis, that this great interest might become one united and harmonious body, whose combined energy should labor to secure the greatest good to the whole country, a strong effort to that end being urged by the gentlemen comprising the Chicago Convention through a committee appointed for that special purpose, that what was supposed by the cattle growers of the great Northwest, and those east of the great river, to be of more vital importance to them, viz: legislation enabling the recently constructed Animal Industry Bureau to effectually grapple with and stamp out the prevailing exotic and infectious diseases that are known to exist in the country, and thereby to relieve our country's product from the odium of disease now so heavily militating against our cattle product in European markets, was really of small importance, if any, to this St. Louis Convention. Although we did succeed in getting through a single resolution instructing Congress on this latter point, yet your delegation feels that on account of the way it was passed and the little interest manifested in it by the majority of this large body, in all probability that resolution will never reach Congress, and hence the time and labor of your delegation and that of similar bodies of cattle growers who have combined for their own interests and protection, was in a great degree wasted, or, to say the least, very unsatisfactory.

Respectfully submitted,

D. B. GILLHAM.

The following reports of Superintendents of Departments for the State Fair of 1884, were read and ordered spread upon the journal:

CLASS A—CATTLE.

JOHN P. REYNOLDS, *Superintendent.*

To the State Board of Agriculture:

The Superintendent of Class A for the past year respectfully reports:

The exhibition in this department was considerably restricted as to numbers by the formal exclusion of the Jerseys on account of their alleged infection by pleuro-pneumonia, and by the apprehension on the part of many breeders of other varieties of cattle that there was serious danger in transporting and exhibiting their herds at the fairs. As to the result in the cases of those who did not stay away, but braved this supposed danger, it has not come to my knowledge that any one has suffered for his temerity.

Personally I have great faith and confidence in the conditions under which cattle are grown and handled in this prairie country in exempting them from liability to attack from infectious disease, and am decidedly of the opinion that, while no reasonable precautionary or remedial measure should be omitted, or the possible danger of the presence of infectious cattle diseases in the country be ignored, our breeders and feeders are liable to be "scared" a great many times before they are "hurt" once. Doubtless for the Fair of 1885 there will be nothing of the same apprehension of danger to interfere with a full exhibit.

THE FAT-STOCK SHOW.

No similar hindrance to a full exhibit was met with at this great American show of butchers' stock. Numerically it was quite the equal of its predecessors, in quality far superior. The entries numbered one hundred and fifty-five (155), representing four (4) breeds and their grades and crosses. There are some changes in the rules and in the list of premiums for this show, which I desire to present for the consideration of the Board at the proper time, but which it is not necessary to anticipate by further reference to them in this report.

Entries, Offerings and Awards—Fair 1884.

Lot	Breed, Etc.	Number of Entries.							Amount of premiums offered	Amount of premiums paid
		4 years old or over	3 years old or over	3 years old and under 4	2 years old and under 3	1 year old and under 2	Under 1 year old	Total		
1	Short-Horn bulls	....	2	....	....	3	2	7	$135	$95
1	" cows and heifers	2	....	3	4	4	3	16	175	175
2	" herd—bull, cow and 3 heifers	....	....	....	....	....	....	2	50	50
3	" sweepstakes—bulls	....	....	....	....	....	....	3	50	50
3	" " —females	....	....	...	....	....	....	7	50	50
	Total	2	2	3	4	7	5	35	$460	$420
4	Hereford bulls	....	1	....	2	3	2	8	135	95
4	" cows and heifers	1	....	1	2	8	2	14	175	145
5	" herd—bull, cow and 3 heifers	....	....	....	....	..	....	1	50	50
6	" sweepstakes—bulls	....	....	....	....	....	....	7	50	50
6	" " —females	....	....	...	....	....	....	8	50	50
	Total	1	1	1	4	11	4	38	$460	$390
7	Devon bulls	....	3	....	1	1	6	11	135	65
7	" cows and heifers	8	....	3	4	5	5	25	175	160
8	" herd—bull, cow and 3 heifers	....	....	....	....	....	....	3	50	50
9	" sweepstakes—bulls	....	....	....	....	....	....	4	50	50
9	" " —females	....	....	....	....	....	....	8	50	50
	Total	8	3	3	5	6	11	51	$460	$375

Entries, Offerings and Awards—Continued.

Lot.	Breed, Etc.	Number of Entries.							Amount of premiums offered.	Amount of premiums paid.
		4 years old or over.	3 years old or over.	3 years old and under 4.	2 years old and under 3.	1 year old and under 2.	Under 1 year old.	Total.		
10	Polled Angus bulls	....	1	....	3	2	2	8	$135	$110
10	" cows and heifers	4	....	4	4	5	2	19	175	175
11	" herd—bull, cow and 3 heifers	....	....	....	....	....	....	1	50	50
12	" sweepstakes—bulls	....	....	....	....	....	....	3	50	50
12	" " —females	....	....	....	....	....	....	3	50	50
	Total	4	1	4	7	7	4	34	$460	$435
13	Holstein bulls	....	4	....	1	4	9	18	135	120
13	" cows and heifers	6	....	5	5	6	5	27	175	175
14	" herd—bull, cow and 3 heifers	....	....	....	....	....	....	4	50	50
15	" sweepstakes—bulls	....	....	....	....	....	....	6	50	50
15	" " —females	....	....	....	....	....	....	6	50	50
	Total	6	4	5	6	10	14	61	$460	$445
16	Jersey bulls	....	....	....	....	....	....	....	135	......
16	" cows and heifers	....	....	....	....	....	....	....	175	......
17	" herd--bull, cow and 3 heifers	....	....	....	....	....	....	....	50	......
18	" sweepstakes—bulls	....	....	....	....	....	....	....	50	......
18	" " —females	....	....	....	....	....	....	....	50	......
	Total	....	....	....	....	....	....	....	$460	......
19	Ayrshire bulls	....	1	....	1	1	1	4	135	$85
19	" cows and heifers	4	....	1	1	2	1	9	175	135
20	" herd—bull, cow and 3 heifers	....	....	....	..	....	....	1	50	50
21	" sweepstakes—bulls	....	....	....	....	....	....	1	50	50
21	" " —females	....	....	....	....	....	....	4	50	50
	Total	4	1	1	2	3	2	19	$460	$375
22	Grand sweepstakes, beef breeds, herd—bull, cow and 3 heifers	....	....	....	....	....	....	4	500	500
23	Grand sweepstakes, beef breeds, young herd—bull, cow and 4 heifers	....	....	....	....	....	....	5	175	175
24	Grand sweepstakes, milk breeds, herd—bull, cow and 3 heifers	....	....	....	....	....	....	7	500	500
	Grand total	25	12	17	28	44	40	254	$4,395	$3,610

Respectfully submitted,
JOHN P. REYNOLDS,
Superintendent Class A—Cattle.

CLASS B—HORSES.

E. C. LEWIS, *Superintendent.*

To the State Board of Agriculture:

GENTLEMEN:—If there was anything lacking in the exhibit in other live stock departments at the Fair of 1884, it was amply made up in that of horses.

It was expected that the exhibit of draft horses would be one of unusual excellence and extent, and that anticipation was fully realized in the combination of the ordinary exhibit with that of the National Clydesdale Association. Perhaps some comment should be made upon the degree of satisfaction obtained from this combination.

The Superintendent personally conducted the work of that department of the Fair, entirely satisfied with every one except himself. He desires expressly to mention the diligent and efficient assistance of the following named gentlemen who aided him in the different branches of the horse department: Mr. A. C. McIntire, Mendota; Mr. Seneca Tupper, Morris; Mr. William Hamilton, Wenona; Mr. Imus, Mendota and Mrs. Ransom Bullock, Tonica. But for the aid extended by these able and experienced gentlemen, your Superintendent would have been compelled to call upon his associates upon this Board for assistance.

In view of these considerations it is respectfully suggested, that it would be well to divide Class B into two departments, with a superintendent from the Board for each.

It is unnecessary to discuss the reasons for this suggestion in this report. Those of the Superintendent are that he was overworked and he thinks that more efficient service might be obtained by such a division.

No suggestions are offered in reference to this department other than as above. The premiums and rules governing the awarding of the same as provided last year seem to be very satisfactory to those in charge of the department as well as to the general public.

The importance of a classification of the different kinds of horses in stalls so as to insure a more prompt appearance in the exhibitor's ring, is insisted upon.

It is very difficult to make up the rings for committees to pass upon under the present arrangement, without much delay and great dissatisfaction.

The exhibit of horses at the late Fair has never been approached in point of numbers at any previous Fair held in this State. The quality of the stock was in keeping with the number.

The exhibits of light and heavy horses creditably respresented all the leading horse breeding establishments in the West and South.

The number of entries of the several breeds of horses was as follows: Thoroughbreds, 29; roadsters, 114; French draft, 112; English draft, 265; grade draft, 102; horses for all work, 72; saddle horses, 11; carriage horses, 22; gentlemen's driving horses, 39; Total number of entries, 773.

Entries, Offerings and Awards, Fair 1884.

Lot..................	Breed, Etc.	Number of Entries.								Amount premiums offered	Amount premiums paid.............
		4 years old or over........	3 years old and under 4......	2 years old and under 3......	1 year old and under 2......	Under 1 year old.......	Brood mare with 2 colts..	Stallion with 5 colts.......	Total.........		
25	Thoroughbred stallions	3	....	....	....	....	...	1	4	$250	$140
25	" mares	8	....	....	4	4	2	....	18	200	140
26	" sweepstakes—stallions	....	....	...	....	...	....	....	2	100	100
26	" " mares	....	....	....	....	....	...	....	5	50	50
	Total	11	....	....	4	4	2	1	29	$600	$430
27	Roadster stallions	14	3	8	7	6	....	2	40	250	250
27	" mares	8	7	4	6	1	2	....	28	200	190
28	" sweepstakes—stallions	....	....	..	....	....	....	....	29	100	100
28	" " mares	....	....	....	....	....	....	....	17	50	50
	Total	22	10	12	13	7	2	2	114	$600	$590
29	French draft stallions	30	13	8	2	2	....	1	56	250	250
29	" " mares	6	3	2	1	..	....	...	12	200	115
30	" " sweepstakes—stallions	....	....	....	....	....	....	....	34	100	100
30	" " " mares	....	....	....	...	....	..	....	10	50	50
	Total	36	16	10	3	2	....	1	112	$600	$515
31	English draft stallions	29	22	36	12	5	...	3	107	250	250
31	" " mares	15	12	16	12	12	7	....	74	200	200
32	" " sweepstakes—stallions	....	....	....	....	...	....	....	51	100	100
32	" " " mares	....	....	....	....	....	....	....	33	50	50
	Total	44	34	52	24	17	7	3	265	$600	$600
33	Grade draft stallions	7	3	14	10	6	...	1	41	250	250
33	" " mares	8	....	3	7	4	5	....	27	200	170
34	" " sweepstakes—stallions	....	....	....	...	....	...	....	18	100	100
34	" " " mares	....	...	....	....	....	....	....	16	50	50
	Total	15	3	17	17	10	5	1	102	$600	$570
35	Horses for all work—stallions	10	6	4	4	2	....	1	27	250	250
35	" " " mares	3	5	3	4	....	3	....	18	200	175
36	" " " sweepstakes—stalli'ns	....	....	....	....	....	....	....	16	100	100
36	" " " " mares	....	....	....	....	....	....	....	11	50	50
	Total	13	11	7	8	2	3	1	72	$600	$575

Entries, Offerings and Awards—Continued.

Lot	Breed, Etc.	Number of Entries.								Amount premiums offered	Amount premiums paid
		4 years old or over	3 years old and under 4	2 years old and under 3	1 year old and under 2	Under 1 year old	Brood mare with 2 colts	Stallion with 5 colts	Total		
37	Saddle stallions	2							2	$90	$30
37	" mares	2							2	90	30
37	" geldings—sweepstakes								3	50	50
37	" mares "								2	50	50
37	" stallions "								2	100	100
	Total	4							11	$380	$260
38	Carriage team								7	60	60
38	Family mare or gelding								15	30	30
	Total								22	$90	$90
39	Gentlemen's driving horses—pair mares								4	60	60
39	" " " " geldings								4	60	20
39	" " " single stallion								4	60	40
39	" " " " mare								9	45	45
39	" " " " gelding								18	45	45
	Total								39	$270	$210
40	Jacks									155	
40	Jennets									115	
40	Mules									90	
41	Sweepstakes—jack with 3 mules									50	
41	" jennet with 2 colts									25	
41	" mule team									40	
	Total									$475	
42	Equestrianism—boys' riding		6						5	21	$21
43	Saddle ponies		8						2	30	30
	Grand total	145	74	98	69	42	19	9	773	$4,866	$3,891

Respectfully submitted,
E. C, LEWIS,
Superintendent Class B—Horses.

CLASS C—SHEEP.

D. W. VITTUM, *Superintendent.*

To the State Board of Agriculture:

I have the honor to report that the show in the sheep department of the Fair of 1884 was a success, averaging, in the number and character of animals exhibited, with those of preceding years.

Exhibitors were more prompt than formerly in occupying the pens, so that the department was ready for the inspection of visitors Tuesday forenoon.

So far as ascertained the only adverse criticism of the sheep department was based on the inconvenience of reaching it. In this, both exhibitors and visitors joined to a limited extent, while gracefully accepting a situation for which the Board was in nowise responsible.

The isolation of the sheep pens and the inability of persons in their vicinity to see or learn what was transpiring at other parts of the ground, will doubtless account for the somewhat limited attendance, as at no time during the week were there so large crowds as in former years have gathered about the sheep rings.

Considerable difficulty was experienced in securing the services of judges to make the awards in this department, as only one in six of those designated by the Board for that purpose reported for duty during the week. The records will disclose the fact that of the forty-two names enrolled as judges in the sheep rings, only seven were present to discharge the duties for which they were designated.

The most serious embarrassment from this cause was experienced in the fine wool rings, in which awards, with the consent of all exhibitors, were finally made by one judge, who was prevailed upon to discharge that difficult and responsible duty. It is highly desirable that a recurrence of this embarrassment be avoided in future exhibitions under control of the Board. Much inconvenience to exhibitors must result from any arrangement placing it beyond the power of the Superintendent of the department to control the time for making awards.

Recently it has become a custom with certain exhibitors in lots for middle wools other than Southdowns, to color the outer ends of the wool before placing their animals on exhibition. I have not felt justified in considering exhibitors of animals thus treated as within the operation of the rule enforcing penalties for attempts at deception. There certainly is no such disposition on their part. I am, however, of opinion, that a rule prohibiting such coloring should be adopted in arranging for future exhibitions.

Of the three cups designated as special premiums by the Illinois Wool Growers' Association, but one was competed for and awarded. This went to the fine wool flock of Messrs. Peck & Sons, Geneva, Ill., in compliance with the conditions accompanying its offering. Under the rule requiring more than one competitor for each offering before awards could be made, the special prizes in the middle and long wool rings were not awarded.

In one instance it became my duty to exclude the animals of an exhibitor from the rings in which they had been entered, the judges having decided that such animals had not been sheared in accordance with the published rules of the Board of Agriculture.

I recommend that in arranging the premium list for future fairs, separate rings be made for such varieties of long and middle wool sheep as have now become fixtures in our State, and which contribute so largely to the interest of our fairs. For instance, in middle wools there is now a ring for Southdowns, other varieties being thrown together, when, as a matter of fact, at several shows the Southdowns have not been more numerous than Shropshires, and in the fair of 1884, were present in less numbers than the Shropshires, and were no more numerous than Oxfords or Hampshire downs. The comparative number and value of these varieties has recently undergone so great a change as to make necessary an alteration in the existing system of classification of awards, in order that justice may be done a large and influential class of breeders. Under existing conditions there is no argument to be applied in favor of grouping Oxford and Shropshire and Hampshire sheep into other than sweepstakes rings, that cannot with equal force be applied to the same number of breeds of cattle or horses.

The change here indicated would undoubtedly meet the approval of a large majority of sheep exhibitors. In fact, so far as my information extends, they are unanimously in favor of so increasing the number of lots in the offerings on sheep as to allow each variety to be shown separately, except in the sweepstakes rings, and I am of opinion that the standard of future exhibitions will be advanced by a compliance with their wishes in this behalf.

THE FAT-STOCK SHOW.

I have the honor to report that the entries of sheep for the Fat-Stock Show of 1884, were sufficiently numerous to fill all the space assigned to that department, while the high standard of the animals shown was fully in keeping with the advance that has been a marked feature of the Fat-Stock Shows from their inception to the present time.

Animals were promptly in place and ready for judging, in accordance with the published rules. In addition to those competing for prizes, a large number of breeding animals were exhibited and sold during the continuance of the Show. The success attending this arrangement seems worthy the attention of the Board, with a view to determining the advisability of providing accommodation for meritorious animals, to be offered at public sale at stated times and under regulations that will permit no interference with other departments of the Show.

I desire to here repeat my recommendation of such a classification as will avoid the grouping of the several varieties of breeds of sheep in any except sweepstakes rings. This will somewhat simplify the labor of judges, and will conform to the expressed wishes of exhibitors.

I cheerfully testify to the uniform courtesy of exhibitors in the sheep rings, and their evident desire to contribute in every possible way to the success of the Fat-Stock Show.

Entries, Offerings and Awards—Fair 1884.

Lot	Breeds, Etc.	Number of Entries.				Amount premiums offered	Amount premiums paid
		2 years old and under 3	1 year old and under 2	Under 1 year old	Total		
45	Cotswold rams	7	5	4	16	$70	$70
45	" ewes	7	7	5	19	70	70
46	" sweepstakes—rams				9	20	20
46	" " —ewes				8	15	15
46	" " —ram and 5 ewes				2	50	50
46	" " —ram and 5 of his get				3	50	50
	Total	14	12	9	57	$275	$275
47	Leicester or Lincoln rams	2	3	2	7	70	70
47	" " ewes	2	3	3	8	70	70
48	" " sweepstakes—rams				3	20	20
48	" " " —ewes				3	15	15
48	" " " —ram and 5 ewes				2	50	50
48	" " " —ram with 5 of his get				2	50	50
	Total	4	6	5	25	$275	$275
49	Southdown rams	1	1	3	5	70	50
49	" ewes	2	2	3	7	70	70
50	" sweepstakes—rams				2	20	20
50	" " —ewes				3	15	15
50	" " —ram and 5 ewes					50	
50	" " —ram with 5 of his get					50	
	Total	3	3	6	17	$275	$155
51	Shropshiredown, etc., rams	10	16	10	36	70	70
51	" ewes	16	14	12	42	70	70
52	" sweepstakes—rams				12	20	20
52	" " —ewes				11	15	15
52	" " —ram and 5 ewes				3	50	50
52	" " —ram with 5 of his get				5	50	50
	Total	26	30	22	109	$275	$275
53	American Merino rams	19	27	10	56	70	70
53	" " ewes	22	20	18	60	70	70
54	" " sweepstakes—rams				20	20	20
54	" " " —ewes				22	15	15
54	" " " —ram and 5 ewes				7	50	50
54	" " " —ram with 5 of his get				14	50	50
	Total	41	47	28	179	$275	$275
55	French Merino, etc., rams					70	
55	" " ewes					70	
56	" " sweepstakes—rams					20	
56	" " " —ewes					15	
56	" " " —ram and 5 ewes					50	
56	" " " —ram with 5 of his get					50	
	Total					$275	
57	Long Wool—12 months fleece from sheep over 2 years old				3	5	5
57	" " —fleece from sheep under 2 years old				3	5	5
57	Middle Wool—12 months fleece from sheep over 2 years old				2	5	5
57	" " —fleece from sheep under 2 years old				3	5	5
57	Fine Wool—12 months fleece from sheep over 2 years old				1	5	5
57	" " —fleece from sheep under 2 years old				1	5	5
	Total				13	$30	$30
58	Grand Sweepstakes—Flocks				9	200	200
	Grand total	88	98	70	40	$1,880	$1,485

Respectfully submitted,

D. W. VITTUM, Jr., *Superintendent Class C—Sheep.*

CLASS D—SWINE.

D. GORE, *Superintendent.*

To the State Board of Agriculture:

The exhibit of swine at the late State Fair was exceedingly good. The Poland China exhibit was the largest in number, and in quality surpassed any exhibition I have ever witnessed. The Berkshire exhibit was not so full as at some former exhibitions, but was fully up to any other in point of excellence. In the Chester White and Victoria exhibit the show was larger than last year and the quality better. The show of small Yorkshires and Suffolks was very good, the former taking most of the prizes. The show of Essex hogs was some better than in former years. The Duroc Jersey Reds exhibited were in greater number and of decidedly better quality than those of any former exhibition. This breed is fast growing into popular favor.

Your Superintendent would recommend that there be no grand herd sweepstakes prize offered, since it has been thoroughly demonstrated to him that it is impossible to procure a committee of unprejudiced men, as every man competent of judging has a favorite breed.

The following table gives the entries, offerings and awards in this class at the late Fair:

Entries, Offerings and Awards—Fair 1884.

Lot.	Breed, Etc.	Number of Entries.				Amount of premiums offered.	Amount of premiums paid.
		2 years old or over.	1 year old and under 2.	Under 1 year old.	Total.		
60	Berkshire boars	3	13	19	35	$85	$85
60	" sows	7	14	15	36	85	85
60	" sow and pigs	....	....	....	6	30	30
60	" boar and 4 ewes	....	....	....	4	25	25
60	" boar with 5 of his get	....	....	....	5	20	20
61	" sweepstakes—boars	....	....	....	16	20	20
61	" " —sows	....	....	....	20	20	20
	Total	10	27	34	122	$285	$285
62	Poland China boars	4	9	16	29	85	85
62	" " sows	15	11	21	47	85	85
62	" " sow and pigs	....	....	....	5	30	30
62	" " boar and 4 sows	....	....	....	6	25	25
62	" " boar with 5 of his get	....	....	...	4	20	20
63	" " sweepstakes—boars	....	....	....	20	20	20
63	" " " —sows	....	....	..	23	20	20
	Total	19	20	37	134	$285	$285
64	Chester White and Victoria boars	5	3	12	20	85	85
64	" " " sows	12	12	16	40	85	85
64	" " " sow and pigs	....	....	....	9	30	30
64	" " " boar and 4 sows	....	....	...	5	25	25
64	" " " boar with 5 of his get	....	....	...	6	20	20
65	" " " sweepstakes—boars	....	....	....	11	20	20
65	" " " " —sows	....	....	...	13	20	20
	Total	17	15	28	104	$285	$285
66	Essex boars	3	2	4	9	85	85
66	" sows	5	4	6	15	85	85
66	" sow and pigs	....	....	....	3	30	30
66	" boar and 4 sows	....	....	....	2	25	25
66	" boar with 5 of his get	....	....	....	3	20	20
67	" sweepstakes—boars	....	....	....	6	20	20
67	" " —sows	....	....	....	6	20	20
	Total	8	6	10	34	$285	$285

Entries, Offerings and Awards—Continued.

Lot.	Breed, Etc.	Number of Entries.				Amount of premiums offered.	Amount of premiums paid.
		2 years old or over.	1 year old and under 2.	Under 1 year old.	Total.		
68	Small Yorkshire and Suffolk boars	2	3	5	10	$85	$85
68	" " " sows	4	4	6	14	85	85
68	" " " sow and pigs	....	....	....	3	30	30
68	" " " boar and 4 sows	....	....	....	2	25	25
68	" " " boar with 5 of his get	....	....	....	2	20	20
69	" " " sweepstakes—boars	....	....	....	6	20	20
69	" " " " —sows	....	....	....	6	20	20
	Total	6	7	11	43	$285	$285
70	Duroc Jersey boars	1	5	9	15	85	75
70	" " sows	3	4	12	19	85	85
70	" " sow and pigs	....	....	....	5	30	30
70	" " boar and 4 sows	....	....	....	1	25	25
70	" " boar with 5 of his get	....	....	....	4	20	20
71	" " sweepstakes—boars	....	...	....	8	20	20
71	" " " —sows	....	....	....	11	20	20
	Total	4	9	21	63	$285	$275
72	Other distinct breeds—2 boars and 3 sows	....	....	....	....	50	......
73	Grand sweepstakes, herd—boar and 5 sows	...		....	22	75	75
	Grand total	64	84	141	532	$1,835	$1,775

Respectfully submitted,
D. GORE.
Superintendent Class D—Swine.

CLASS E—POULTRY.

JOHN GRIFFITH, *Superintendent.*

To the State Board of Agriculture:

The exhibit of poultry at the late Fair was the largest ever seen at the Illinois State Fair. The quality of the exhibit has seldom been equaled and never surpassed.

The experiment of using an expert judge worked admirably, and the plan of making the awards by a single competent committeeman gave very general satisfaction. The money saved by this procedure largely exceeded the cost of the expert judge.

The following table gives the number of entries and amount of premiums offered and paid in this department at the 1884 Fair.

Entries, Offerings and Awards—Fair 1884.

Lot.	Breeds, Etc.	Number of entries.	Amount premiums offered.	Amount premiums paid.
75	Asiatic	83	$80	$60
76	Dorking, Dominique, Plymouth Rock	61	60	49
77	Spanish	52	60	43
78	Hamburgs	25	60	39
79	Polish	30	50	36
80	French	20	30	20
81	Game	32	120	27
82	Bantams	45	90	59
83	Miscellaneous	19	50	26
84	Guineas	9	20	10
85	Turkeys	33	82	52
86	Ducks	49	55	50
87	Geese	26	40	34
88	Rabbits	5	35	14
89	Ferrets	3	10	5
90	Pigeons	5	15	15
	Total	497	$857	$539

Respectfully submitted,
JOHN GRIFFITH,
Superintendent Class E—Poultry.

CLASS F—MECHANIC ARTS.

E. E. CHESTER, *Superintendent.*

To the State Board of Agriculture:

As Superintendent of Mechanic Arts at the late State Fair, I beg leave to submit the following report:

The entire space assigned to this department was fully occupied with a very creditable exhibit, among which were many things new to the general public and worthy the attention of manufacturers, housekeepers and others.

The offer of a large premium for a display of miners' tools, failed to bring out the expected exhibit. The one entry for this, the only money prize in the department, was considered by your committee not worthy of a premium.

I recommend that the classification of premiums in Class F, for the next State Fair, remain as in 1884, except that the lot for musical instruments be transferred (by request of the Superintendent of Class L,) from Class L to Class F, with the following classification of premiums:

Best display Pianos and Organs	Diploma
Best display Brass Instruments	Diploma
Best display String Instruments	Diploma

Also that the lot, Miners' Tools read Miners' Implements, with the following classification and premiums:

MINERS' IMPLEMENTS.

Best display Coal Miners' Implements	Diploma
Best Double-Hoisting Engine	$25 00
Best Single Hoisting-Engine	25 00
Best Mine Car	5 00
Best Coal Screen	5 00
Best Car Wheel	5 00
Best Cage for Hoisting Coal	5 00
Best Safety Catch for Cages	5 00
Best Ventilating Fan	5 00
Best Mining Machine	5 00
Best Non-conductor for Steam Pipe	5 00
Best Water-pipe for Mines	5 00
Best Mining Pump	5 00
Best Air Compresser	5 00
Best Miner's Lamp	5 00
Best Safety Lamp	5 00
Best Mine Surveying Instrument	5 00

Best Iron or Steel Rope	$5 00
Best Safety Squib	5 00
Best "T" Rail	5 00
Best Shearer for Pit Head	5 00
Best Coal Miners' Tools. (As required by the Illinois law)	5 00
Best Prospecting Drill	5 00
Best Anemometer, Best Barometer, Best Thermometer, Best Water Gauge, } For use in mines	5 00

The following is a complete list of the exhibits and exhibitors in this department:

Fence Weaver—F. A. Everett, Quincy.

Scales—Chicago Scale Co., Chicago.

Forgings—Chicago Forging Co., Chicago.

Sewing Machines—
  W. J. Whitcomb & Son, Chicago.
  Chicago Scale Co., Chicago.
  E. D. Myburn, Chicago.

Car Lock—J. A. Fisher, Chicago.

Lamp Filler—V. A. Griswold, Chicago.

Ladders—
  Chicago Step Ladder Co., Chicago.
  P. Bent & Co., Clinton, Ia.

Dairy Implements—
  DeLaval Separator Co., New York, N. Y.
  Palmer & Son, Rockford.
  Batchellor & Son, Rock Falls.
  McDermod & Kennedy, Rockford.
  John Boyd, Chicago.

Weather Strips—Wilson & Walters, Chicago.

Soap—
  B. T. Babbitt, Chicago.
  E. Long, Chicago.

Washing Machine—J. C. O'Brien, Chicago.

Floor Clamp—Schofield & Carter, Chicago.

Pavement—A. T. Barber, Washington, D. C.

Refrigerator—Templeton & Gifford, Chicago.

Fruit Dryer—Ligonier Fruit Dryer Co., Ligonier, Ind.

Horse Shoes—National Horse Shoe Exchange, Chicago.

Folding Beds—Forest City Furniture Co., Rockford.

Blank Books—Illinois Printing Co., Danville.

Paints—Heath & Milligan, Chicago.

Leather—D. B. McCutcheon, Chicago.

Miners' Tools—
  Taneyhill Bros., Fulton.
  Wm. Giles, Mt. Olive.
  James Cook, Oglesby.

Lubricating Oil—Baum's Castorine Co., Chicago.

Prepared Food—L. A. Raven, Chicago.

Window Blinds—J. B. Childs, Chicago.

Motor—Keystone Spring Motor Co., Chicago.

Hand Grenade—Hand Grenade Co., Chicago.

Drain Tile—Oak Glen Tile Co., Oak Glen.

Metal Felloe—Chicago Metal Felloe Co., Chicago.

Whiffletrees—King Whiffletree Co., Chicago.

Food Steamer—W. J. Whitcomb & Co., Chicago.

The following table gives the number of entries in each lot in this department at the 1884 State Fair:

Entries—Fair 1884.

Lot.	Articles.	Number of entries.
91	Stoves, Castings, Worked Metals, etc	7
92	Household Furniture	10
93	Dairy Utensils	22
94	Manufactures of various kinds	14
95	Leather, Harness, etc	1
96	Sewing and Knitting Machines and Spinning Wheels	6
97	Miners' Tools, Coal Mining Machinery and Appliances	5
	Total	65

Respectfully submitted,
E. E. CHESTER,
Superintendent Class F—Mechanic Arts.

CLASS G—FARM PRODUCTS.

JOSEPH SKEAVINGTON, *Superintendent.*

To the State Board of Agriculture:

The exhibit at the late Fair of grains, seeds, vegetables, dairy products and pantry stores was much larger than heretofore, and the quality of the articles has never been surpassed. The interest of the farmer, seedsman and housewife in this department resulted in many large displays that added materially to the attractions of the Fair.

The number of entries of dairy products while some larger than last season, was meagre and not in keeping with the magnitude and importance of this industry. The lack of facilities for keeping butter and cheese at the proper temperature doubtless had something to do with the limited number of entries.

The display of bread, cake and pantry stores was nearly three times as large as that of the previous Fair and the superior quality of the articles was in keeping with the extent of the exhibit. The ladies succeeded in making the 1884 exhibit of pantry stores one of the most valuable and attractive displays ever seen at the Illinois State Fair.

The following table gives the number of entries and amount of premiums offered and paid in this department:

Entries, Offerings and Awards—Fair 1884.

Lot.	Articles.	Number of entries.	Silver Medals.		Diplomas.		Cash Premiums.	
			No. offered.	No. awarded	No. offered.	No. awarded	Amount offered.	Amount paid.
98	Grains and seed	105			2	1	$258	$208
99	Seed corn grown in three Grand Divisions of the State	30					450	450
100	Vegetables	76	1	1	1	1	202	161
101	Butter, cheese, etc	39			6		141	120
102	Bread, cakes, etc	176			1		147	136
	Total	426	1	1	10	2	$1,198	$1,075

Respectfully submitted,
JOSEPH SKEAVINGTON,
Superintendent Class G—Farm Products.

CLASS H—HORTICULTURE AND FLORICULTURE.

GEO. S. HASKELL, *Superintendent.*

To the State Board of Agriculture:

The exhibit in this class was large and meritorious. The number of competitors indicates an increasing interest in this department.

The show of cut flowers was much better than heretofore and attracted much attention.

There was an unusually large exhibit of fruit, which creditably represented all portions of this and adjoining States.

The State Horticultural Society heartily co-operated with the Board in making the show of fruit, and your Superintendent recommends that suitable acknowledgments be made to the Society.

The number of entries and the amount of premiums offered and paid in this department at the Fair is as follows:

Entries, Offerings and Awards, Fair 1884—Section 1.

Lot......	Articles, Etc.	Number of entries......	SILVER MEDALS.		DIPLOMAS.		CASH PREMIUMS.	
			No. offered.	No. awarded	No. offered.	No. awarded	Amount offered.	Amount paid.
103	Trees (competition open to all)	....	2	....	2	....	....	....
103	Flowers and plants (professional)	32	2	2	1	1	$228	$100
104	Cut flowers (professional)	73	3	1	4	4	407	360
105	Cut flowers, floral designs and bouquets (amateur)	87	....	....	....	....	196	179
	Total	192	7	3	7	5	$831	$639

Section 2.

Lot......	Articles, Etc.	Number of entries......	SILVER MEDALS.		DIPLOMAS.		CASH PREMIUMS.	
			No. offered.	No. awarded	No. offered.	No. awarded	Amount offered.	Amount paid.
106	Home-grown fruits (professional)	44	....	....	2	....	$378	$331
107	Home-grown fruits (amateur)	28	....	....	....	....	101	78
108	Jellies, preserves, pickles, etc	44	1	....	3	1	220	200
	Total	116	1	....	5	1	$699	$609

Respectfully submitted,
GEO. S. HASKELL,
Superintendent Class H—Horticulture and Floriculture.

CLASS I—ARTS.

J. IRVING PEARCE, *Superintendent.*

To the State Board of Agriculture:

There was a very large increase in the number of entries in this department as compared to the exhibit made in 1884. The character of the exhibits in the art department at the late Fair indicate that the leading artists are taking a deep interest in the Fair. Special attention is invited to several very meritorious private collections on exhibition that contained some rare pictures from the studios of noted artists.

The number of entries, amount of premiums offered and paid in this department at the late Fair are as follows:

Entries, Offerings and Awards—Fair 1884.

Lot.	Articles.	Number of entries.	Silver Medals.		Cash Premiums.	
			No. offered.	No. awarded	Amount offered.	Amount paid.
106	Fine Arts	159	3	1	$330	$300
110	Decorative Art	111	....	....	148	130
111	Photography, etc	1	....	....	....	....
	Total	271	3	1	$478	$430

Respectfully submitted,
J. IRVING PEARCE,
Superintendent Class I—Arts.

CLASS K—TEXTILE FABRICS.

H. G. SAVAGE, *Superintendent.*

To the State Board of Agriculture:

The display in this department at the 1884 State Fair has never been surpassed at any previous Fair, either in the number of entries or the attractive character of the exhibits. The display of manufactured goods, while some larger than at the previous Fair, was not as large as was to be expected when the location of the Fair is considered. The entries of ornamental needle-work were larger than usual and included exhibits by all the professional exhibitors and many amateurs.

The display of sewing machine work was larger than at any previous show, and it would be difficult to improve the high character or attractiveness of the same.

The following table gives the number of entries and amount of premiums offered and paid in this department:

Entries, Offerings and Awards—Fair 1884.

Lot.	Articles.	Number of entries.	Diplomas.		Cash Premiums.	
			No. offered.	No. awarded	Amount offered.	Amount paid.
112	Manufactured Goods	2	17	2	....	....
112	Household Fabrics	219	....	....	$127	$120
113	Quilts and Patchwork	122	....	....	88	79
115	Ornamental Needle-work	393	....	....	280	275
116	Fancy Work	283	....	....	138	135
117	Machine Work	4	2	2	35	35
118	Display of Ladies' Work	24	....	....	85	85
	Total	1047	19	4	$753	$729

Respectfully submitted,
H. G. SAVAGE.
Superintendent Class K—Textile Fabrics.

CLASS L—EDUCATION AND SCIENCE.

ALLAN C. RUSH, *Superintendent*

To the State Board of Agriculture:

I have the pleasure of reporting an increase over last year's exhibit in nearly all the lots in this department.

The school display was especially good, embracing work from various parts of the State, and much of the work by pupils from eight to ten years of age, would have done credit to much older persons. This work was eagerly sought out by their comrades and teachers during the exhibition and attracted interest from all.

The industrial drawing was good, embracing almost everything in its class, and like the school work, much of it was done by mere children. Many of the drawings deserve especial mention and added greatly to the interest in this department.

In mineralogy there was an excellent display and a creditable one in conchology and taxidermy.

I am much indebted to Messrs. Haskell and Conrad, members of the Board, Prof. Hull of Carbondale, and Prof. Lane, Supt. Cook county schools, for their cheerful assistance in this department.

The following tables give the number of entries and amount of premiums offered and paid in Class L, at the 1884 Fair:

Entries, Offerings and Awards, Fair 1884.

Lot.	Exhibit.	Number of entries.	Diplomas.		Cash Premiums.	
			No. offered.	No. awarded	Amount offered.	Amount paid.
119	Graded school exhibit	116	8	8	$64 00	$64 00
120	Graded school exhibit—sweepstakes	35	7	7	105 50	90 50
121	High school exhibit	59	15	15	129 00	126 00
122	High school exhibit—sweepstakes	2	3	2	54 00	20 00
123	Country school exhibit	301	16	16	128 00	128 00
124	Country school exhibit—sweepstakes	44	7	6	108 00	74 00
125	Penmanship	....	....	....	....	....
	Total	557	56	54	$588 50	$502 50

Entries, Offerings and Awards—Fair 1884.

Lot......	Articles.	Number of entries......	Diplomas.		Silver Medals.		Cash Premiums.	
			No. offered.	No. awarded	No. offered.	No. awarded	Amount offered.	Amount paid.
126	Taxidermy, Mineralogy and Conchology..........	11	....	....	....	....	$230	$170
127	Entomology, Botany, etc..	7	....	....	....	....	105	75
128	Musical Instruments	9	....	....	....	....	....	....
129	Printing, Engraving, etc...	2	....	....	3	....	36	1
130	Architectural and Mechanical Drawings	4	7	4	....	....	85	55
	Total	33	7	4	3	....	$456	$301

Respectfully submitted,

ALLAN C. RUSH,

Superintendent Class L.

SPEED DEPARTMENT.

E. C. LEWIS, *Superintendent.*

To the State Board of Agriculture:

The following table gives the number of entries, amount of premiums offered and paid in the speed department at the Fair of 1884.

The speed contests added much to the attractions of the Fair, and the time made leaves no doubt of the very good quality and speed of the competing animals.

The number of horses entered in the speed rings by the breeders at the late Fair is a very encouraging indication of the increased interest taken in these contests by the reputable horsebreeders who have made large investments in the leading families of trotting horses, and are more interested in these exhibitions than any other class.

Entries, Offerings and Awards—Fair 1884.

Lot....	Race.	Number of entries.	Amount offered.	Amount paid.
131	Trotting race—2:17 class—Stake $500...........................	3	$500	$450 00
131	Trotting race—2:22 class—Stake $500...........................	4	500	500 00
131	Trotting race—2:27 class—Stake $500...........................	4	500	500 00
131	Trotting race-2:34 class—Stake $500...........................	3	500	450 00
131	Trotting race—2:40 class—Stake $500...........................	4	500	500 00
131	Trotting race—1 and under 2—Stake $500.....................	3	500	450 00
131	Trotting race—2 and under 3—Stake $500.....................	4	500	500 00
131	Trotting race—3 and under 4—Stake $500.	....	500	....
131	Trotting race—4 and under 5—Stake $500.....................	4	500	500 00
131	Trotting race—Stallions having made season of 1884—Stake $200, with $25 entrance fee....	3	200	247 50
131	Trotting race—Free for all Stallions—Stake $500	....	500	....
131	Pacing race—2:20 class—Stake $500............................	4	500	500 00
	Total..	36	$5,700	$4,597 50

Respectfully submitted,

E. C. LEWIS,

Superintendent Speed Department.

CLASS N—AGRICULTURAL IMPLEMENTS.

PETER SCHUTTLER, *Superintendent.*

M. CONRAD, *Acting Superintendent.*

To the State Board of Agriculture:

We have again to thank the exhibitors in this extensive department for their liberal efforts to make their share of attractions at our late annual Fair a success.

The generous action of your Board, moreover, in carrying out the suggestion made in my last report, viz: of supplying free fuel and water to all working engines, assuredly added not a little to the inducements usually held out to this class of attractions, and as many new names appear, the results were very gratifying.

It certainly reflects credit upon the implement houses of the country, and upon their confidence in your Board as well, that so many of them went to the considerable expense of the permanent display buildings, already catalogued in my last report. The long and attractive array was increased last year by several new ones erected in "Western Row" by additional exhibitors, in full assurance of the success of their venture.

Following is a complete list of the exhibits and exhibitors in this department:

Lot 132.

Portable Farm Engine—5 entries:
- Portable Iron Roller Mill Co., Chicago.
- Pitts Agricultural Works (2), Buffalo.
- Case & Willard Threshing Machine Co., Battle Creek, Mich.
- Nichols, Shepard & Co., Battle Creek, Mich.
- Pitts H. A. Sons Manufacturing Co., Marseilles, Ill.

Traction Steam Engine—5 entries:
- Kingman & Co. (2), Peoria, Ill.
- Northwestern Manufacturing and Car Co., Stillwater, Minn.
- Nichols, Shepard & Co., Battle Creek, Mich.
- Gizer Manufacturing Co., Waynesboro, Pa.

Steaming Apparatus for Cooking Food for Stock—1 entry:
- Rice, Whitacre & Co., Chicago.

Horse Power for General Farm Purposes—7 entries:
- Marseilles Manufacturing Co. (2), Marseilles, Ill.
- David Bradley Manufacturing Co., Chicago.
- Sandwich Manufacturing Co, (2), Sandwich, Ill.
- American Well Works, Aurora, Ill.
- Taylor Horse Power Co., Chicago.
- David Bradley Manufacturing Co., Chicago.

Hay and Stock Scales—3 entries:
- Charles Bruner (2), Peru, Ill.
- Chicago Scale Co., Chicago.

Pump for Well—7 entries:
- Marseilles Manufacturing Co., Marseilles, Ill.
- Temple Pump Co. (2), Chicago.
- Mast, Foos & Co., Springfield, O.
- American Well Works, Aurora, Ill.
- Clark & Co., Somonauk, Ill.
- United States Wind Engine Co., Batavia, Ill.
- Althouse, Wheeler & Co., Waupun, Wis.

Pump for Cistern—2 entries:
- Marseilles Manufacturing Co., Marseilles, Ill.
- Temple Pump Co., Chicago.

Gate for Farm Use—8 entries:
- Star Gate Co. (2), Abingdon, Ill.
- J. P. Heaton (2), Newman, Ill.
- W. Schwendler, Appleton, Wis.
- Joliet Wire Check Rower Co., Joliet, Ill.
- East Grove Milling and Lumber Co., East Grove, Ill.
- Appleton Manufacturing Co., Appleton, Wis.

Miscellaneous—14 entries:
- American Live Stock Salt Roller Co., Chicago—Salt Roller and Appliances.
- N. W. Hardware Co., Chicago—Barbed Fencing.
- J. R. Davis & Son, Chicago—Well Augur.
- Joliet Wire Check Rower Co., Joliet, Ill.—Barn Door Hangers.
- A. L. Barber, Chicago—Asphalt Pavement.
- Hatch & Riesberg, Peoria—Small Engine to Show Reverse Motion.

Mast, Foos & Co., Springfield, O.—Iron Fence.
Myers, House & Co., Canton, O.
Temple Pump Co., Chicago (3).
Nichols, Shepard & Co., Battle Creek, Mich.—Steam Thresher.
Monitor Works, Beloit, Wis.
A. M. Davis, Alton, Ill.—Fence Machine.

Wood Sawing Machine—2 entries:
George Valentine, Monticello, Ill.
M. O. Smith, New Buffalo, Mich.

Cider Mill and Press—5 entries:
E. G. Bristol & Gale, Chicago.
Keystone Manufacturing Co. (2), Sterling, Ill.
Whitman Agricultural Co., St. Louis, Mo.
C. H. Stewart, Chicago.

Corn and Cob Mill—6 entries:
American Grinding Mill Co., Chicago.
Stover Manufacturing Co. (2), Freeport, Ill.
Whitman Agricultural Co., St. Louis, Mo.
Freeport Machine Co., Freeport, Ill.
Foos Manufacturing Co., Springfield, O.

Machine for Opening Ditch for Drain Tile—1 entry:
Chicago Ditching Machine Co., Chicago.

Road Making Machine—10 entries:
S. Pennock & Sons Co. (4), Fort Wayne, Ind.
Thomas Kane Co. (3), Chicago.
Lamborn Roadmaking Machine Co., Brighton, Ill.
G. W. Taft, Abingdon, Conn.
New Era Manufacturing Co., Chicago.

Portable Grist Mill for farm use—9 entries:
E. S. Bristol & Gale, Chicago.
Foos Manufacturing Co., Springfield, Ohio.
Portable Iron Roller Co., Chicago.
Appleton Manufacturing Co., Appleton, Wis.
Clark & Co., Somonauk, Ill.
Chicago Grinding Mill Co., Chicago.
Whitman Agricultural Works, St. Louis, Mo.
American Grinding Mill Co., Chicago.
Challenge Wind Mill Co., Batavia, Ill.
U. S. Wind Mill Co., Batavia.

Portable Mill for Shelling Corn—2 entries:
Marseilles Manufacturing Co., Marseilles, Ill.
Winchester & Partridge Manufacturing Co., Whitewater, Wis.

Portable Saw Mill and Engine for Lumber—2 entries:
Kingman & Co., Peoria, Ill.
Foos Manufacturing Co., Springfield, Ohio.

Well Boring Machine—1 entry:
American Well Works, Aurora, Ill.

Miscellaneous:
W. H. Clark, Chicago—Power Grooving Machine.
J. T. Burnett, Lamoille, Machine for Cutting Ear Corn.
Clark & Co., Somonauk, Windmill Churn Attachment.
Raymond Bros., Chicago, Portable Power and Sweep Mill.
American Grinding Mill Co., Chicago, Meal Bolt.
J. W. Penfield & Son, Willoughby, Ohio.
R. B. Adams, Columbus, O., Stump Puller.

Display 2 Seated Carriages—1 entry:
Abbott Buggy Co., Chicago.

Display of Buggies—2 entries:
Weddle & Co., Chicago.
Abbott Buggy Co., Chicago.

Top Buggy—3 entries:
J. W. Hewett, (2) Jackson, Mich.
Kingman & Co., Peoria, Ill.
Clark, J. L. & Son, Oshkosh, Wis.

Open Buggy—1 entry:
J. W. Hewett, Jackson, Mich.

Sulky—1 entry:
Kingman & Co., Peoria, Ill.

Skeleton Wagon—1 entry:
Racine Wagon and Carriage Co., Racine, Wis

Two-horse Wagon—23 entries:
Kingman & Co., (2) Peoria, Ill.
Weber Wagon Co., Chicago.
King and Hamilton & Co.. Ottawa, Ill.
E. J. Bristol & Gale, Chicago.
G. H. Spencer & Co., Chicago.
LaBelle Wagon Works, Fond du Lac, Wis.
Schuttler & Hotz, (5) Chicago.
J. McCallum & Bros., (4) South Elgin, Ill.
Moline Wagon Co., (6) Moline, Ill.
Decatur Iron Felloe Wagon Co., Decatur.
Brown Manufacturing Co., Zanesville, O.
J. I. Case, Receiver, Racine, Wis.

Spring Wagon—5 entries:
Kingman & Co., (2) Peoria, Ill.
Racine Wagon Co., Racine, Wis.
Moline Wagon Co., (2) Moline, Ill.

One-Horse Cart—3 entries:
John B. Allber, Hinckley, Ill.
Weddle & Co., Chicago.
Schuttler & Hotz, Chicago.

Miscellaneous—14 entries:
Marseilles Manufacturing Co., Marseilles, Ill.—Harvester truck for transferring Harvesters.
Weddle & Co., Chicago—4 cutters (sleighs).
John W. Hewett, (3) Jackson, Mich.—Gearing.
The King Whippletree Co., Chicago—Whippletree.
Weir Plow Co., Monmouth—3 Horse Equalizer.
W. D. McNeal, Chicago—Axle Oil.
Metal Felloe Co., Chicago—3 sets Carriage Wheels.
Schuttler & Hotz (4) Chicago—Stock Feeders' Dumping Wagon.
M. Dailey, Waterman, Ill.—Feed and Barrel Cart.

Reapers—5 entries:
Kingman & Co., Peoria, Ill.
D. S. Morgan & Co., (2) Chicago.
McCormick, H. M. Co., Chicago.
Warder, Bushnell & Glessner, Chicago.

Dropper—2 entries:
Kingman & Co., Peoria, Ill.
McCormick H. M. Co., Chicago.

Self Rake Reaper—5 entries:
Kingman & Co., Peoria, Ill.
Johnston Harvester Co., Chicago.
L. C. O'Brien, Zanesville, Wis.
McCormick H. M. Co., Chicago.
Warder, Bushnell & Glessner, Chicago.

Combined Reaper and Mower—4 entries:
Kingman & Co., Peoria, Ill.
Johnston Harvester Co., Chicago.
Warder, Bushnell & Glessner, Chicago.

Harvester and Binder—11 entries:
D. S. Morgan & Co., Chicago.
C. Aultman & Co., Canton, O.
Russell Harvester Machine Co., Polo, Ill.
Geo. Esterly & Sons, Whitewater, Wis.
Sandwich Manufacturing Co., Sandwich, Wis.
Wm. Deering, Chicago.
Hoover & Gamble, Miamisburg, Ohio.
A. M. Reed, Whitewater, Wis.
Osborn, D. M., & Co., Chicago, Ill.
Minneapolis Harvester Works, Minneapolis, Minn.
Winona Harvester Works, Winona, Ill.
C. H. Frost, Plano, Ill.
Dennett Harvesting Machine Co., Milwaukee, Wis.
McCormick H. M. Co., Chicago.
H. A. Pitts Sons' Manufacturing Co., Marseilles, Ill.

Grain Binder—1 entry:
Kingman & Co., Peoria, Ill.

Grain Binder (Twine)—5 entries:
Russell Harvesting Machine Co., Polo, Ill.
Johnson Harvesting Co., Chicago.
Winona Harvester Works, Winona, Ill.
Dennett Harvesting Co., Milwaukee, Wis.
Warder, Bushnell & Glessner, Chicago.

Thresher—3 entries:
M. & J. Rumely, LaPorte, Ind.
Kingman & Co., Peoria, Ill.
Northwestern Manufacturing and Car Co., Stillwater, Minn,
Nichols, Shepard & Co., Battle Creek, Mich.

Separator—6 entries:
Pitts, H. A., Manufacturing Co., Marseilles, Ill.
Kingman & Co., Peoria, Ill.
Pitts Agricultural Works, Buffalo, N. Y. (2)
Case & Willard Threshing Machine Co., Battle Creek, Mich.
Johnston & Field, Racine, Wis—Fanning Mill.

Grain Drill—8 entries:
D. E. McSherry & Co., Dayton, Ohio.
Gere, Truman, Platt & Co. (2), Owego. N. Y.
Hart, Hitchcock & Co., Peoria, Ill.
L. C. O'Brien, Janesville, Wis.
Farmers Friend Manufacturing Co., Dayton, O.
C. Fackler, East Dubuque, Iowa.

Fanning Mill—3 entries:
E. S. Bristol & Gale, Chicago.
Johnson & Field, (2) Racine, Wis.
Dickey & Pease, Racine, Wis.

Miscellaneous—9 entries:
E. S. Bristol & Gale, Chicago—Seeder and Cultivator.
Hasselman Bros., Indianapolis—Straw Stacking Machine.
C. E. Merryfield & Co., Indianapolis, Ind—Strawstacker.
Ashley Wire Co., Joliet—Binder Trucks.
Russel Harvester Co., Polo, Ill—Trucks.
Wm. Deering & Co., Chicago—Grain Harvester.
C. Aultman & Co., Canton, Ohio, (3)—Farm Engines.

Mower—23 entries:
Kingman & Co., (2), Peoria, Ill.
Janesville Machine Co., Janesville, Wis.
Russell Harvesting Machine Co., Polo, Ill.
Hoover & Gamble, Miamisburg, Ohio.
Warrior Mower (2), Little Falls, New York.
L. C. O'Brien, (2), Janesville, Wis.
Emmerson, Talcott & Co., (2),Rockford, Ill.
Fuller-Johnson Manufacturing Co., (2), Madison, Wis.
Winona Harvester Works, Winona, Ill.
D. J. Morgan & Co., (2), Chicago.
C. H. Frost, Plano, Ill.
Warder, Bushnell & Glessner Chicago.
Bradley & Co., Syracuse, N. Y.
Mast, Foos & Co., Springfield, Ohio.
McCormick H. & M. Co., Springfield.
Dennett Harvesting Machine Co., Milwaukee.
Hopkins Manufacturing Co., Chicago.
J. D. Manny Mower Co., Rockford, Ill.
Osborne, D. M. & Co., Chicago.
Johnston Harvester Co., Chicago.
W. A. Wood H. & M. Co.

Hay Tedder—7 entries:
Kingman & Co., Peoria, Ill.
E. S. Bristol & Gale, Chicago.
Sterling Manufacturing Co., Sterling, Ill.
Springfield Manufacturing Co., Springfield, Ohio.
J. W. Bookwalter, Springfield, Ohio.
J. H. Thomas & Son, Springfield, Ohio.
Shawnee Agricultural Co., Xenia. Ohio.
Belcher & Taylor Agricultural Tool Co., Chicopee Falls, Mass.

Horse Hay Rake—18 entries:
Kingman & Co., (3), Peoria, Ill.
Emerson, Talcott & Co., Rockford, Ill.
Warrior Mower Co., Little Falls, N. Y.
Springfield Manufacturing Co., (2), Springfield, Ohio.
Fuller & Johnson Manufacturing Co., (3), Madison, Wis.
E. S. Bristol & Gale, (2), Chicago.
Acme Hay Harvester Co., Peoria, Ill.
Beck & Hopkins, Chicago.
J. W. Bookwalter & Co., Springfield, Ohio.

J. H. Thomas & Son, Springfield, O.
Shawnee Agricultural Co., Xenia, O.
Albion Manufacturing Co., Albion, Mich.
Chieftain Hay Rake Co., Canton, O.

Hay Loader—3 entries:
Keystone Manufacturing Co., Sterling, Ill.
Beck & Hopkins, Chicago.
J. Porter, Ottawa.

Ricker—1 entry:
Acme Hay Harvester Co., Peoria, Ill.

Horse Hay Fork—4 entries:
Eagle Fork Co., (4), Appleton, Wis.
E. S. Bristol & Gale, (2). Chicago.
Janesville Hay Tool Co., Janesville, Wis.
Myers, House & Co., Canton, Ohio.
W. S. Wind Engine Co., Batavia, Ill.
Milwaukee Hay Tool Co., (5), Milwaukee, Wis.

Hay Elevator and Carrier, &c.—15 entries:
Eagle Fork Co. (2), Appleton, Wis.
E. S. Bristol & Yale, Chicago.
J. A. Porter, Ottawa, Ill.
Burbank & Coventry, Howard, Ill.
Brower Hay Tool Co., Crawfordsville, Ill.
Janesville Hay Tool Co., Janesville, Wis.
Hunt, Helm & Ferris, Harvard, Ill.
Wratlist Wylde (2), Belvidere, Ill.
Myers, House & Co., Canton, O.
U. S. Wind Engine Co., Batavia, Ill.
Appleton Manufacturing Co., Appleton, Wis.
Milwaukee Hay Tool Co., Milwaukee, Wis.

Portable Hay Press—12 entries:
Famous Manufacturing Co. (2), Quincy, Ill.
P. K. Dedrick (2), Chicago.
Slawson & Jones (2), Racine, Wis.
Kappe & Dabb, Belleville, Ill.
Whitman Agricultural Works (2), St. Louis, Mo.
Chicago Hay Press Co., Chicago.
Geo. Ertel & Co., Chicago.

Feed Cutters—13 entries:
D. E. McSherry & Co., Dayton, O.
Belle City Manufacturing Co., Racine, Wis.
E. W. Ross & Co. (9), Fulton, N. Y.
Keystone Manufacturing Co. (2), Sterling, Ill.
Ann Arbor Agricultural Co., Ann Arbor, Mich.

Hay and Straw Cutter—12 entries:
E. W. Ross & Co. (9), Fulton, N. Y.
Belle City Manufacturing Co., Racine, Wis.
Keystone Manufacturing Co., Sterling, Ill.
Rice, Whitacre & Co., Chicago.

Clover Huller and Thresher—2 entries:
Newark Machine Co., Newark, O.
Birdsell Manufacturing Co., South Bend, Ind.

Seed Sower—6 entries:
Utter Manufacturing Co., Rockford, Ill.
E. S. Bristol & Gale (2), Chicago.
Hart, Hitchcock & Co. (2), Peoria, Ill.
Appleton Manufacturing Co., Appleton, Wis.

Broadcast Seed Sower—6 entries:
D. E. McSherry & Co., Dayton, O.
Utter Manufacturing Co., Rockford, Ill.
L. C. O'Brien (2), Janesville, Wis.
G. W. Rouse & Son, Peoria, Ill.
Whitman Agricultural Co., St. Louis, Mo.
S. L. Allen & Co., Philadelphia, Pa.

Miscellaneous—
E. S. Bristol & Gale, Chicago, Lawn Mower.
E. W. Ross & Co. (6), Fulton, N. Y., Ensilage Power Cutters.
J. V. Howser, Sidney, Ill., Ear Corn Cutter and Slicer.
E. G. Douglas, Elgin.
Rice, Whitacre & Co., Chicago, Stationary Engines.
Quincy Manufacturing Co., Quincy, Ill.
David Bradley Manufacturing Co., Chicago, Upright Horse Power.
Champion Hay Unloader Co., Shortsville, N. Y.

Corn Planter—16 entries:
Kingman & Co., Peoria, Ill.
Keystone Manufacturing Co., Sterling, Ill.
Klinefelter & Dillman Co., Joliet, Ill.
Briggs & Enoch Manufacturing Co., Rockford, Ill.
Fuller Johnson Manufacturing Co., Madison, Wis.
Emerson, Talcott & Co., Rockford, Ill.
Joliet Wire Check Rower Co., Joliet, Ill.
Challenge Corn Planter Co., Grand Haven, Mich.
E. S. Bristol & Gale, Chicago.
Geo. W. Brown (3), Galesburg, Ill.
Deere & Mansure Co., Moline, Ill.
Ray Plow Co., Burlington, Ia.
Farmers' Friend Manufacturing Co., Dayton, O.
W. H. Banks & Co., Chicago.
R. H. & C. M. Avery, Peoria, Ill.

Corn Drill—10 entries:
Kingman & Co., Peoria, Ill.
Geo. W. Brown, Galesburg, Ill.
Briggs & Enoch Manufacturing Co., Rockford, Ill.
Deere & Mansure, Moline, Ill.
David Bradley Manufacturing Co., Chicago.
Farmers' Friend Manufacturing Co., Dayton, O.
Challenge Corn Planter Co. (3), Grand Haven, Mich.
Avery Planter Co., Peoria, Ill.

Check Rower—19 entries:
Kingman & Co., Peoria, Ill.
Challenge Corn Planter Co., Grand Haven, Mich.
Keystone Manufacturing Co., Sterling, Ill.
Klinefelter & Dallman Manufacturing Co., Joliet, Ill.
Briggs & Enoch Manufacturing Co., Rockford, Ill.
R. W. Alexander, Galesburg, Ill.
Joliet Wire Check Rower Co., Joliet, Ill.
Chambers, Beering Q. & Co., Decatur, Ill.
Emmerson, Talcott & Co., Rockford, Ill.
George W. Brown (2), Galesburg, Ill.
Richmond Check Rower Co., Richmond, Ind.
Robert Faries, Decatur, Ill.
C. H. Odell, Fairbury, Ill.
Deer, Mansure & Co., Moline, Ill.
Ray Plow Co., Burlington, Ia.
W. H. Banks & Co., Chicago.
Avery Plow Co., Peoria, Ill.
Haworth & Sons, Decatur, Ill.

Cultivators—33 entries:
Marseilles Manufacturing Co., Marseilles, Ill.
Peru City Plow Co. (3), Peru, Ill.
Gere, Truman, Platt & Co., Owego, N. Y.
Weir Plow Co. (3), Monmouth, Ill.
Warrior Mower Co., Little Falls, N. Y.
Pattee Plow Co. (3), Monmouth, Ill.
Fuller & Johnson Manufacturing Co. (4), Madison, Wis.
Allen, S. L., & Co., Philadelphia, Pa.
Brown Manufacturing Co., Zanesville, O.
James Horrix, Morris, Ill.
J. I. Case Plow Co. (3), Racine, Wis.
E. S. Bristol & Gale, Chicago.
Briggs & Enoch, Rockford, Ill.
Slosson Bros., Verona, Ill.
George W. Brown, Galesburg, Ill.
D. Bradley Manufacturing Co., Chicago.
Parlin & Orendorf Co. (3), Canton, Ill.
Chambers, Beering Q. & Co., Decatur, Ill.
Ray Plow Co., Burlington, Ia.
Appleton Manufacturing Co., Appleton, Wis.
Brown Manufacturing Co., Zanesville, O.
Avery Plow Co., Peoria, Ill.
J. H. Gilmore, Chicago.

Riding Cultivators—11 entries:
Gere, Truman, Platt & Co., Owego, N. Y.
David Bradley Manufacturing Co., Chicago.
Slosson Bros., Verona, Ill.
Utter Manufacturing Co., Rockford, Ill.
Parlin, Orendorf & Co., Canton, Ill.
Fuller & Johnson Manufacturing Co., Madison, Wis.
Emmerson, Talcott & Co., Rockford, Ill.
Peru City Plow Co., Peru, Ill.
J. I. Case Plow Co., Racine, Wis.
Weir Plow Co. (3), Monmouth, Ill.
Brown Manufacturing Co., Zanesville, O.
Avery Planter Co., Peoria, Ill.
Albion Manufacturing Co., Albion, Mich.

Corn Stalk Cutter—11 entries:
E. S. Bristol & Gale, Chicago.
J. I. Case Plow Co., Racine, Wis.
George W. Brown (2), Galesburg, Ill.
Peru City Plow Co., Peru, Ill.
D. Bradley Manufacturing Co., Chicago.
Briggs & Enoch Manufacturing Co., Rockford, Ill.
Parlin & Orendorf Co., Canton, Ill.
Avery Planter Co. (2), Peoria, Ill.
Deere & Mansure, Moline, Ill.

Hand Corn Sheller—11 entries:
Marseilles Manufacturing Co. (2), Marseilles, Ill.
Gere, Truman, Platt & Co., Owego, N. Y.
King, Hamilton & Co., Ottawa, Ill.
E. S. Bristol & Gale, Chicago.
Sandwich Manufacturing Co. (2), Sandwich, Ill.
Keystone Manufacturing Co. (3), Sterling, Ill.
U. S. Wind Engine Co., Batavia, Ill.

Power Corn Sheller—11 entries:
Marseilles Manufacturing Co. (3), Marseilles, Ill.
E. S. Bristol & Gale, Chicago.
King, Hamilton & Co., Ottawa, Ill.
Sandwich Manufacturing Co. (3), Sandwich, Ill.
Keystone Manufacturing Co. (2), Sterling, Ill.
American Grinding Mill Co., Chicago.

Walking Plow—45 entries:
Fuller & Johnson Manufacturing Co., (5), Madison, Wis.
Weir Plow Co., Monmouth, Ill.
Joliet Wire Check Rower Co., Joliet, Ill.
Parlin & Orendorf Manufacturing Co., Canton, Ill.
Peru City Plow Co., (9), Peru, Ill.
J. I. Case Plow Co., (20), Racine, Wis.
David Bradley Manufacturing Co., (7), Chicago.
Avery Planter Co., Peoria, Ill.
Deere & Co., Moline.

Sulkey Plow—11 entries:
E. S. Bristol & Gale, Chicago.
David Bradley Manufacturing Co., Chicago.
Peru City Plow Co., Peru, Ill.
J. I. Case Plow Co., Racine, Wis.
Weir Plow Co., Monmouth, Ill.
Briggs & Enoch Manufacturing Co., (3), Rockford, Ill,
Parlin & Orendorf Co., Canton, Ill.
Avery Planter Co., Peoria, Ill.
Elkhart Iron Works Co., Elkhart, Ind.
Deere & Co., Moline, Ill.

Gang Plow—2 entries:
Briggs & Enoch Manufacturing Co., Rockford, Ill.
David Bradley Manufacturing Co., Chicago, Ill.
Deere & Co., Moline, Ill.

Pulverizer—4 entries:
Kingman & Co., Peoria, Ill.
Keystone Manufacturing Co., Sterling, Ill.
Parlin & Orendorf Co., Canton, Ill.

Harrow—22 entries:
Kingman & Co., (2), Peoria, Ill.
David Bradley Manufacturing Co., Chicago.
Parlin & Orendorf Manufacturing Co., (2), Canton, Ill.
Gere, Truman, Platt & Co., (2), Owego, N. Y.
Freeport Machine Co., Freeport, Ill.
Weir Plow Co., (2), Monmouth, Ill.
Warrior Mower Co., Little Falls, N. Y.
Peru City Plow Co., (3), Peru, Ill.
Fuller & Johnson, (2), Madison, Wis.
Sterling Manufacturing Co., Sterling, Ill.
J. I. Case Plow Co., Racine, Wis.
R. Lean, Mansfield, Ohio.
Avery Planter Co., Peoria, Ill.
M. Dailey, Waterman, Ill.
Albion Manufacturing Co., Albion, Mich.

Roller—2 entries:
E. S. Bristol & Gale, Chicago.
David Bradley Manufacturing Co., Chicago.

Potato Digger—5 entries:
- Fish & Middaugh, Clarendon Hills, Ill.
- E. S. Bristol & Gale. Chicago.
- J. M. McCallum & Bro., South Elgin, Ill.
- Sterling Manufacturing Co., Sterling. Ill.
- Ernest C, Schroeder, Itasca, Ill.

Wind Mill—15 entries:
- Marseilles Manufacturing Co., (2), Marseilles, Ill.
- Freeport Machine Co., Freeport, Ill.
- Mast, Foos & Co., Sringfield, O.
- Fairbank, Morse & Co., Chicago.
- Althouse, Wheeler & Co., (3),, Waupun, Wis.
- Clark & Co., Somonauk, Ill.
- Stover Manufacturing Co., Freeport, Ill.
- U. S. Wind Mill Co., Batavia, Ill.
- Nichols & Murphy, (2), Elgin, Ill.
- Challenge Wind Mill and Tread Mill Co., Batavia, Ill.
- C. H. Miller, Millington, Ill.

Miscellaneous:
- Joliet Wire Check Rower Co., Joliet, Harvester Truck.
- Deere & Co., Moline, Ill., Plows.
- Robert Faries, Decatur, Wire Tester.
- Wood & Retteg, Peru, Ill., Harvester Attachments.
- J. M. Callum & Bro., South Elgin.
- Peru City Plow Co., Peru, Ill., Single Shovel.
- " " " " Double Shovel.
- Weir Plow Co., Monmouth, Ill., Garden Cultivator.
- " " " Combined Lister and Planter.
- " " " Double Shovel Plow.
- Chas. Atkinson, Chicago, Wheel Cutter for Plows.
- Cole & Fleming, Springfield, Ohio, Posthole Digger.

Not Classified—
- Evans & Foos Manufacturing Co., Springfield, O., Corn Planter.
- Eureka Mower Co., Towanda, Pa., Mowers.
- Esterly, Geo. & Co., Whitewater, Wis., Reapers and Harvesters.
- Eagle Machine Co., Lancaster, O., Corn Shellers.
- Eclipse Wind Engine Co., Beloit, Wis., Wind Mills.
- Foster Plow Co., Chicago, Plows.
- Grand Detour Plow Co., Dixon, Ill., Plows.
- Hoosier Drill Co., Richmond, Ind., Grain Drills.
- Illinois Agricultural Works, Springfield, Ill., Cultivators.
- Janesville Machine Co., Janesville, Wis., Reapers and Mowers.
- Van Diver Corn Planter Co., Quincy, Ill., Corn Planter.
- Olds Wagon Works, Ft. Wayne, Ind., Wagons.
- J. W. Stoddard & Co., Dayton, O., Horse Hay Rakes.
- Moline Plow Co., Moline, Ill., Plows.
- O'Brien Bros. Manufacturing Co., Tiffin, O., Cultivators.
- Kalamazoo Wagon Co., Kalamazoo, Mich., Spring Wagons.
- Long & Alstetter Co., Hamilton, O., Corn Cultivators.
- P. P. Mast & Co., Springfield, O., Grain Drills.
- Mann, E. C. & Co., Geneva, Ill., Potato Digger.
- L. P. Miller, Cincinnati, O., Grinding Mill.
- Peoria Plow Co., Peoria, Ill., Plows.
- Plano Manufacturing Co,, Plano, Ill., Harvesters.
- Pierpont & Co., New Haven, Conn., Feed Cutter.
- Staver, H. C. & Co., Chicago, Feed Mills.
- Seiberling, J. F. & Co., Akron, O., Twine Binder.
- J. A. Spencer, Dwight, Ill., Hay Press.
- Studebaker Bros. Manufacturing Co., South Bend, Ind., Wagons.
- Standard Wagon Co., Cincinnati, O., Wagons.
- Speer & Co., Pittsburg, Pa., Shovel Plow.
- Selby, James & Co., Peoria, Ill., Corn Planter.
- Thomas Harrow Co., Geneva, N. Y., Harrows and Pulverizers.
- Tiffin Agricultural Co., Tiffin, O., Sulky Hay Rake.
- E. L. Walker, Chicago, Hay Tools.

In conclusion, it is the hope and expectation of the writer that with the return of increased prosperity the coming year, the next annual State Fair may eclipse all of its brilliant predecessors.

The following table gives the number of entries in each lot in this department:

Entries—Fair 1881.

Lot.	Articles.	Number of entries.
132	Engines, pumps, etc	52
133	Mills, machines, etc	49
134	Vehicles	47
135	Grain harvesters, etc	61
136	Haying machinery, etc	141
137	Planters, plows, etc	222
	Total	572

Respectfully submitted,
PETER SCHUTTLER,
Superintendent Class N—Agricultural Implements.
by M. CONRAD, *Acting Superintendent.*

AMPHITHEATRE AND SHOW RING.

J. W. JUDY, *Marshal.*

To the State Board of Agriculture:

The Marshal of the Ring takes pleasure in reporting that the duties of his office were discharged to the apparent satisfaction of visitors and exhibitors.

The large exhibits of stock at the late Fair increased the labors of your marshal and made it necessary to employ additional help.

Respectfully submitted,
JAS. W. JUDY,
Marshal of Ring.

SUPERINTENDENT OF GROUNDS.

D. B. GILLHAM, *Superintendent.*

To the State Board of Agriculture:

Your Superintendent of Grounds would respectfully report that the labors and expenses of that department were conducted under the usual pressure incident to holding the Fair at a long distance from the base of supplies, the expenses being increased also by reason of supplying the machinery department with water, in addition to the coal that was ordered by the Board. The supplying of water was exceedingly laborious and expensive, on account of the limited supply available, which required the labor of teams and a corps of men with a special superintendent, not only through the day, but also through the nights during the exhibition, and often times requiring a double set of men and teams which, of course, greatly augmented the expenses of the department.

In this connection your Superintendent, seeing no benefit whatever accruing from this class of supplies, it being an innovation hitherto unknown, and adding almost double work and double expense to the department, would recommend that for future fairs, we revert to the old system of allowing exhibitors to furnish their own supplies. It could be done with less expense to them than to us by uniting their interests, as they would order less and greatly economize in its use.

As there was no meeting of the Committee of Arrangements, and it was tacitly understood that each member was to add to his own department, and especially to the grounds, your Superintendent went to Chicago and ordered some changes made, which the experience gathered at the previous year's exhibition seemed to render necessary. One change was the closing of the gates east of the grand entrance and opening them west of it, having the street cars stop and unload west of and across the grand entrance. This was to prevent pedestrians from having to cross the main entrance, as it became exceedingly dangerous at times, especially during the afternoons when the city people were attending the Fair.

In this connection I also ordered built an office for the Treasurer, as the one east of the gate was totally inadequate for the proper and prudent transaction of his business. At the same time, as the previous year's experience seemed to demand it, I ordered an exit gate made at the south-east corner of the grounds, for safety, but when it was completed the city refused us the use of it, except to light vehicles, as it opened on a boulevard. It was therefore of no use to us whatever, as it was useless to have a separate exit for traffic teams.

These necessary changes were, in the opinion of your Superintendent, chargeable wholly and alone to the local committee of Chicago, under their contract to fit up the grounds for the use of the Board for the annual Fairs of 1883-84. But on coming to Springfield after the Fair and looking over the charges to my department, I discovered that these charges, to the amount of $1,907.66, had been made to my department. I at once wrote my assistant, W. L. Gillham, for an explanation, which was that Mr. Conrad and other members of the Board had said to him that it was necessary for some one of the departments to sign it so that the local committee would feel authorized to pay it. So he signed it, under a misapprehension of the case.

Had your Superintendent for a moment believed that this bill was chargeable to and payable by the Board, he would, as he has always done, have contracted for the work, which could doubtless have been completed for less than one-half of the bill presented.

All other bills presented, except the coal bill presented by Mr. W. E. Johnson, through Mr. Conrad, by letter to Mr. Pearce, which I am now investigating by telegraph, and which I yet hope to be able to report upon satisfactorily to-day, were all just, as your Superintendent believes.

Respectfully submitted,
D. B. GILLHAM,
Superintendent of Grounds.

FORAGE AND STALLS.

JOHN VIRGIN, *Superintendent.*

To the State Board of Agriculture:

There was an abundant supply of stalls at the late Fair, owing to the limited number of some of the breeds of cattle exhibited.

There was no complaint on account of limited supply of forage or other supplies needed for horses and cattle, and exhibitors generally expressed themselves as well pleased with the accommodations provided.

The receipts for stalls amounted to nine hundred and seventy-five dollars ($975.00).

Respectfully submitted,
JOHN VIRGIN,
Superintendent Forage and Stalls.

PRESS DEPARTMENT.

E. B. DAVID, *Superintendent.*

To the State Board of Agriculture:

I have the honor to report that every attention was shown to members of the press in attendance at the late Fair.

In addition to the members of the press furnished complimentary tickets by members of the Board, your Superintendent issued two hundred and nineteen (219) press tickets. These tickets were divided about equally between the Chicago and country press.

Respectfully submitted,
E. B. DAVID,
Superintendent Press Department.

PERMITS AND PRIVILEGES.

JAS. M. WASHBURN, *Superintendent.*

To the State Board of Agriculture:

The undersigned, Superintendent of Permits and Privileges, respectfully submits the following report of his department for the year 1884:

RECEIVED FOR PERMITS AND PRIVILEGES AT THE STATE FAIR.

PERMITS FOR DINING HALLS.

Burleigh, Thomas H	$125 00	
Cregar, Henry	50 00	
Cregar, S. P. (2 permits)	250 00	
Grumbinger, Charles	125 00	
Hurlburt, Alvin	1,000 00	
Wiehleman, F. A	200 00	
Zipp, Mrs. John P	125 00	
		$1,875 00

PERMITS FOR LUNCH-STANDS.

Behlen & Behlen	$75 00	
Brems, John	30 00	
Cregar, S. P. (4 stands)	200 00	
Drake, Philip	50 00	
Forsyth, J. H	35 00	
Friedberger, M	35 00	
Harvey, Nora	75 00	
Hasse, F. E	75 00	
Kohen & Bauch	30 00	
Lockwood & Mann (2 stands)	150 00	
Olinger, W. H	235 00	
Robertson, A. E	60 00	
Underwood, Peter	60 00	
Wilson & Brewer	50 00	
		$1,160 00

PERMITS FOR SHOWS.

Duncan, J. C	$30 00	
Everhart, George P	75 00	
Gillam, Wm	100 00	
Kohl & Middleton	325 00	
Phillips, Joseph	50 00	
Shafer, A. G	50 00	
Wood, Wm	25 00	
Wilks & Rowe	30 00	
		$685 00

PERMITS FOR SWINGS, ETC.

Gallagher, John	$150 00	
Nicholson, Frank	25 00	
Zipp, John P	1,000 00	
		$1,175 00

PERMITS TO SELL FRUITS, POPCORN, LEMONADE, CIDER, CIGARS, TOBACCO, ETC.

Brewer, W. C., to sell cider	$30 00
Bellman & Bascom, to sell oranges, peanuts and lemonade	40 00
Beville, Charles, to sell popcorn, peanuts and lemonade	50 00
Cregar, S. P., 2 candy and fruit stands	50 00
Ellsworth, B. H., to sell ice-cream, lemonade, etc	60 00
Fisher & Dalling, 3 candy and fruit stands	425 00
Huellman & Hindman, to sell fruits, peanuts, etc	30 00
Hurlburt, Alvin, bar under Club House	100 00
Jacobs, A. E., to sell lemonade, popcorn and peanuts	60 00
McCallum, David, to sell figs and lemons	65 00
Myers, Joseph, to sell waffles from wagon	25 00
Nelson, John, to sell candy and fruit	40 00
Pierce, C. W., to sell fruit	100 00

Strand, C., to sell cider from wagon	$30 00	
Stewart, C. H., to make and sell cider	30 00	
Weston, C. D., to make and sell cider	30 00	
Sales sundry privileges under $25	95 00	
Sales wagon tickets	15 00	
		$1,275 00
Total receipts at State Fair		$6,170 00

Amount received on sales of permits and privileges at Fat-Stock Show	$392 10	
On same collected and paid over by Mr. Dysart	10 00	
		$402 10

This amount is approximate only and may be increased or diminished within a limit of five dollars ($5.00).

Respectfully submitted,
JAMES M. WASHBURN,
Superintendent Permits and Privileges.

PURCHASING DEPARTMENT.

B. PULLEN, *Superintendent.*

To the State Board of Agriculture:

I herewith present a detailed statement of the work done by this department.

The purchases are fully one-third larger than for 1883. This is the result of members securing their supplies almost entirely through its agency.

The report will show, 1st: A statement of all articles purchased and their cost; also freight bill and cartage from city to grounds on goods shipped from Springfield to Chicago, together with cost of two new chests, provided to accommodate the increased quantity of goods to be taken care of.

2d. An inventory of all articles turned over to this department by Secretary Fisher. By comparing this statement with the statement of goods received by him at the close of the Fair of 1883, the shortage, if any, will be apparent.

3d. An inventory of all property returned to purchasing agent and by him delivered to S. D. Fisher, Secretary. The presentation, collection and prompt return by members of all property worth saving, to this department at the close of the Fair, is worthy of mention, and it is believed that this property, if carefully preserved, will be sufficient for the needs of the Board for years to come, with but slight additions.

4th. An account with each of the several departments, showing the amount of goods received on requisition, and crediting them with all property returned. No value is attached to the goods received or returned. The lost may be ascertained by comparing this with my report of purchases made in 1883.

5th and last. A detailed statement of shortage or actual consumption, amounting to one hundred and sixty-two dollars and fifty-two cents ($162.52). Of this amount the three items, of ice, lumber and signs, are charged with one hundred and twenty-five dollars and forty-seven cents ($125.47), leaving only thirty-seven dollars and five cents ($37.05) to be charged to all other sources.

ACCOUNT OF PURCHASES MADE.

3	Bolts	$1 15	Cash of Treasurer	$371 78
8	Pad-locks	2 24		
6	Hatchets	2 67		
10	Lanterns	8 34		
12	Twines	1 60		
12	Tacks	1 08		
6	Wicks	15		
24	Staples (small)	10		
14	Dozen hitch rings	4 09		
8	Dozen staples	1 77		
7	Hasps and staples	48		
2	Tack hammers	35		
1½	Kegs nails	3 73		
12	Scratch books	90		
4	Dozen lead pencils	60		
1	Gross pens	65		
1	Lot rubber bands	25		
1	Time book	20		
3	Dozen Pen-holders	60		
12	Pass books	50		
21	Inks	1 50		
1	Quart ink	60		
3	Tablets writing paper	1 13		
2	Packages envelopes	10		
9	Combs	81		
15	Boxes matches	15		
1	Bundle pins	36		
18	Cakes soap	90		
10	Wash basins	1 32		
7	Lamps	4 06		
18	Towels	1 44		
5	Gallons oil	65		
121½	Yards muslin	6 08		
150	Requisitions	1 25		
6	Indexed pass books	1 65		
1,700	Feet common pine	25 45		
2	Pieces 2-10—14	60		
1	Piece 2-4—14	12		
300	Feet grubb plank	3 60		
1	Funnel	35		
1	Door knob	10		
3	Hair brushes	75		
2	Looking glasses	30		
1	Sprinkler	40		
2	Pieces chain	20		
3	Rim locks	47		
1½	Yards cotton flannel	18		
20	Cots	25 00		
44	Double blankets	99 00		
2	Tables	2 70		
6	Chairs	3 00		
13	Indelible pencils	2 25		
25	Rolls toilet paper	3 00		
9	Brooms	2 15		
12	Buckets	2 70		
1	Pitcher and glass	80		
20	Signs	60 20		
6½	Gross screw eyes and hooks	4 60		
13	Barrels	13 00		
2	Boxes or chests	5 00		
16,200	Pounds ice	40 50		
		$349 87		
	Freight bill on goods shipped from Springfield to Chicago	10 71		
	Cartage	10 50		
	Car fare	70		
		$371 78		$371 78

Inventory of Articles received from S. D. Fisher, Secretary, Sept. 5, 1884.

1	Butter tryer
1	Canvas Ex. bag
7	Straw ticks
10	Towels
1	Sign
30	Double blankets
48	Single "
1	White "
22	Tin cups
2	Coils rope (⅝)
3	" " (1 in.)
2	Wash basins
1	Tin water pitcher
2	Brass faucets
8	Lanterns (2 broke)
20	Buckets
1	Scoop shovel
2	Pitch forks
13	Brooms
33	Cots (2 broke)
25	Chairs
7	Tables
1	5 gal. oil can
150	Ft. rubber hose
1	Tin sprinkler

Inventory of Property returned to Purchasing Agent and by him delivered to S. D. Fisher, Secretary, Sept. 14, 1884.

24	Towels
23	Cups and chains
5	Cups
12	Wash basins (tin)
1	" " (earthen ware)
29	Buckets
51	Cots
15	Brooms
2	Pitch forks
1	Scoop shovel
19	Lanterns (3 broke)
8	Lamps (1 broke)
6	Combs
2	Papers pins
Pt.	Box pens
3½	Papers tacks
2	Wicks
2	Tack hammers
3	Hatchets
3	Doz. pen-holders
2	Cakes soap
6	Glass tumblers
2	Looking glasses
2	Pieces chain
17	Pad-locks
2	Balls twine
1	Door knob
7	Boxes matches
3	Tablets writing paper
2	Scratch books
½	Gross and 6 rings
39	Staples
2	Hair brushes
2	Coils rope (⅝ in.)
3	" " (1 in.)
1	Canvass Ex. bag
1	Butter tryer
4	Signs
7	Straw ticks
1	Cup (earthen ware)
1	Water pitcher (tin)
1	Water pitcher (earthen ware)
2	Sprinklers
150	Ft. rubber hose
2	Brass faucets
31	Chairs
9	Tables
1	5 gal. oil can
1	Funnel
7	Boxes or chests
10	Inks
75	Yds. muslin
1	Bundle baggage checks
12	Rolls toilet paper
1	Toilet fixture
½	Doz. pencils
2	Packages blotters
1	Pass book
1	Lot Gen. Supt. notice cards
8	Ticket boxes
1	Whisk broom
129	Blankets

For all of which the Purchasing Agent holds the Secretary's receipt.

ACCOUNT WITH PRESIDENT.

	Received.		Returned.
1	Cot, ordered for wounded man		
1	Sign		

SECRETARY.

1	Qt. Ink		
4	Cots	4	Cots
9	Blankets	9	Blankets
1	Lamp	1	Lamp
1	Pencil		
1	Pass book		
6	Inks		
1	Package envelopes		
1	Pitcher and glass	1	Pitcher and glass
3	Signs	1	Sign

TREASURER.

1	Broom	1	Broom
2	Buckets	2	Buckets
2	Cups	2	Cups
2	Soaps		
8	Chairs	8	Chairs
1	Paper pins		
3	Cots	3	Cots
6	Blankets	6	Blankets
1	Room in Club house	1	Room
1	Dozen pencils—indelible		
2	Pass books		
5	Inks	3	Inks
2	Pencils		
3	Towels	3	Towels
1	Table	1	Table
1	Room in Club House		

ACCOUNT WITH SEPERINTENDENT OF GROUNDS.

1,000	Ft. common pine		
2	pieces 2-10—14		
1	piece 2-4—14		
300	Ft. grubb plank		
2	Blotters		
10	Cots	10	Cots, (1 broke)
30	Blankets	30	Blankets
1	Scoop shovel	1	Scoop shovel
8	Doz. staples	39	Staples
14	Doz. hitch rings	6	dox. and 6 hitch rings
4	Combs	3	Combs
3	Hair brushes	2	Hair brushes
25	Rolls toilet paper	12	Rolls toilet paper
2	Looking glasses	2	Looking glasses
19	Buckets	9	Buckets
17	Tin cups	17	Tin cups
1	Time book		
16,200	Lbs. ice		
3	Rim locks		
2	Hatchets	2	Hatchet
3	Lanterns	2	Lanterns
24	Small staples		
5	Gallons oil		
7	Brooms		
1½	Kegs nails		
1	Lamp	1	Lamp
6	Hasps and staples		
1	Wash basin	1	Wash basin
6	Cakes soap		
8	Towels	5	Towels
1	Paper pins		
1	Pitcher and glass	1	Picher and glass
2	Signs		

SUPERINTENDENT OF FORAGE AND STALLS.

	Received.		Returned.
2	Cots	2	Cots
7	Blankets	7	Blankets
3	Scratch books		
6	Pencils		
1	Ink	1	Ink
1	Lamp	1	Lamp
1	Lantern	1	Lantern
1	Pass book		
1	Table	1	Table
1	Paper tacks	1½	Tacks
1	Tablet writing paper		
2	Towels	2	Towels
1	Box matches		
4	Pen holders	4	Pen-holders
3	Signs	1	Sign

SUPERINTENDENT OF PRESS DEPARTMENT.

3	Indexed pass books		
1	Pen-holder		
1	Pad		
3	Pass books		
3	Pencils		
1	Scratch book		
1	Ink		
2	Signs		

SUPERINTENDENT OF PERMITS AND PRIVILEGES.

6	Chairs	6	Chairs
2	Tables	2	Tables
2	Inks	2	Inks
3	Pen-holders	3	Pen-holders
1	Bucket	1	Bucket
1	Cup	1	Cup
1	Wash basin	1	Wash basin
1	Soap		
2	Towels	2	Towels
4	Blankets	4	Blankets
2	Cots	2	Cots
1	Broom	1	Broom
1½	Tablets writing paper		
1	Box matches		
4	Indexed pass books		
1	Scratch book		
1	Lantern	1	Lantern
2	Signs		
1	Room in Club House		

SUPERINTENDENT OF PURCHASING DEPARTMENT.

	Car fare	70		
	Freight bill	$10 71		
	Cartage	10 50		
125	Requisitions	1 25		
1	Set bolts			
1	Pad lock		1	Pad lock
1	Indelible pencil			
2	Boxes or chests		2	Boxes or chests
2	Signs		1	Sign

	Received.		Returned,
17	Cots	16	Cots and 1 furnished President
28	Blankets	28	Blankets
2	Pieces chain	2	Pieces chain
6	Pad locks	6	Pad locks
1	Tablet writing paper		
½	Paper pins		
1	Broom	1	Broom
4	Chairs	4	Chairs
1	Lamp	1	Lamp
1	Bucket	1	Bucket
1	Cup	1	Cup
6	Lanterns	6	Lanterns
3	Pencils		
1	Ink	1	Ink
2	Pen-holders	2	Pen-holders
1	Box matches		
1	Soap	1	Soap
1	Door-knob	1	Door-knob
1	Sign		
1	Room in Club House		

CLASS "C."

1	Pass book		
1	Scratch book		
1	Table	1	Table
4	Chairs	4	Chairs
1	Bucket	1	Bucket
1	Cup	1	Cup
1	Towel	1	Towel
1	Penholder	1	Penholder
1	Cot	1	Cot
2	Blankets	2	Blankets
1	Broom	1	Broom
1	Lock	1	Lock
1	Wash basin	1	Wash basin
1	Room in Club House		

CLASS "D."

1	Scratch book		
1	Table	1	Table
1	Bucket	1	Bucket
1	Cup	1	Cup
1	Cot	1	Cot
2	Blankets	2	Blankets
1	Wash basin	1	Wash basin
1	Soap		
2	Towels		
2	Pencils		
4	Chairs	4	Chairs
1	Room in Club House		

CLASS "F."

1	Table	1	Table
2	Chairs	2	Chairs
1	Lantern	1	Lantern
1	Bucket	1	Bucket
1	Cup	1	Cup
2	Pencils		
1	Paper tacks		
1	Broom	1	Broom
1	Paper pins		
1	Wash basin	1	Wash basin
1	Towel	1	Towel
1	Padlock		
700	Feet common pine		
1	Room in Club House		

CLASS "F"—INSIDE HALL.

Received.		Returned.	
1	Lantern	1	Lantern
2	Cots	2	Cots
2	Brooms	2	Brooms
4	Blankets	4	Blankets
1	Towel	1	Towel
1	Wash basin	1	Wash basin
1	Sprinkler	1	Sprinkler
2	Chairs	2	Chairs
1	Table	1	Table
1	Paper tacks		

CLASS "F"—OUTSIDE HALL.

1	Penholder	1	Penholder
1	Ink		
3	Pencils		
1	Scratch book		
1	Pass book		
1	Bucket	1	Bucket

CLASS "G."

4	Chairs	4	Chairs
2	Pen holders	2	Pen holders
1	Ink	1	Ink
2	Cots	2	Cots
4	Blankets	4	Blankets
1	Butter tryer	1	Butter tryer
1	Paper pins		
2	Twines		
1	Tack hammer	1	Tack hammer
2	Paper tacks		
2	Pencils		
1	Scratch book		
2	Brooms		
4	Towels	3	Towels
1	Wash basin	1	Wash basin
1	Soap		
2	Buckets	2	Buckets
1	Cup	1	Cup
1	Table	1	Table
75	Yards muslin	75	Yards muslin
1	Box matches		
2	Pass books		
1	Lamp	1	Lamp
1	Sign		

CLASS "H."

2	Lanterns	2	Lanterns
2	Wash basins	2	Wash basins
2	Soap		
2	Towels	1	Towel
5	Cots	5	Cots
4	Papers tacks		
3	Pins		
9	Blankets	9	Blankets
1	Comb		
4	Pencils		
2	Buckets	2	Buckets
2	Cups	2	Cups
1	Pass book		
1	Twine		
1	Sprinkler	1	Sprinkler
2	Brooms	2	Brooms
1	Hatchet	1	Hatchet
1	Chair	1	Chair
1	Box matches		
1	Ink		
1	Sign		

CLASS "I."

Received.		Returned.	
6½	Gross screw eyes and hooks		
6	Twines		

CLASS "L" AND "N."

4	Chairs	4	Chairs
1	Table	1	Table
1	Cot	1	Cot
2	Blankets	2	Blankets
6	Papers tacks	2	Papers tacks
1	Hatchet	1	Hatchet
1	Broom	1	Broom
1	Bucket	1	Bucket
1	Cup	1	Cup
6	Pencils		
1	Ink	1	Ink
6	Penholders	6	Penholders
1	Paper pins		
1	Wash basin	1	Wash basin
1	Soap	1	Soap
2	Towels	2	Towels
46	Yards muslin		
1	Twine		
1	Lamp	1	Lamp
2	Signs		

SHORTAGE OR ACTUAL CONSUMPTION.

4	Towels	$0 32	3½	Dozen pencils	$0 52
3	Buckets	67	13	Indelible pencils	2 25
1	Cot	1 25	11	Pass books	46
7	Brooms	1 65	24	Small staples	10
3	Combs	21	3	Bolts	1 15
10	Papers pins	30	7	Hasps and staples	48
½	Gross pens	32	1½	Kegs nails	3 73
9½	Papers tacks	85	1	Lot rubber bands	25
3	Hatchets	1 34	1	Time book	20
16	Cakes soap	80	2	Packages envelopes	10
10	Balls twine	1 33	125	Requisitions	1 25
8	Boxes matches	08	6	Indexed pass books	1 65
10	Scratch books	75	1,700	Feet lumber	25 45
8½	Dozens hitch rings	2 50	2	Pieces 2x10x14	60
5	Dozen staples	75	1	Piece 2x4x14	12
1	Hair brush	25	300	Feet grubb plank	3 60
16	Signs	55 20	3	Rim locks	47
5	Gallons oil	65	1½	Yards cotton flannel	18
4	Wicks	10	6½	Gross screw eyes and hooks	4 60
11	Inks	55	16,200	Pounds ice	40 50
1	Quart ink	60			
46½	Yards muslin	2 33			$162 52
13	Rolls toilet paper	1 56			

Respectfully submitted,

B. PULLEN,

Superintendent Purchasing Department.

GATES AND TICKETS.

SAMUEL DYSART, *Superintendent.*

To the State Board of Agriculture:

In my report as Superintendent of Tickets for the State Fair and Fat-Stock Show of 1884, I can inform the Board that all the methods adopted in my department in 1883, which proved satisfactory in results, as well as those recommended by the Board at the last annual meeting for protecting your financial interests, were adhered to in the management of the department. In order to have a more perfect business system between your Treasurer and the Superintendent of Tickets, I had prepared, for use at the State Fair, blank check books, by which the Treasurer drew all paying-tickets from my office at their cash value.

At the close of the Fair these checks would furnish indisputable evidence of the number of tickets used, in case there should be a discrepancy in the books of the two officials.

TICKETS.

The rule adopted by the Board at the last annual meeting, limiting the season complimentary tickets to gentlemen and lady, was well observed and proved to be a good measure.

There was only a few cases where alterations appeared to have been made on the face of the ticket and those were at once detected by the gatemen and the ticket taken up. The use of the additional carriage complimentary was an experiment heretofore untried, and I am pleased to be able to report I discovered no serious abuse of that favor, but it is a ticket which should be given out with great caution.

In my recommendations I shall mention it again in reference to further use.

The committee to whom was referred the subject of deciding on a form of season complimentary ticket, at last annual meeting, for the use of the Board, after consultation agreed on a design to be engraved on steel. The work was executed by the Western Bank Note Engraving Company, of Chicago, at a cost of fifty dollars.

The plate is now the property of the Board and can be changed as circumstances may require at a small cost. I had four thousand of these tickets printed, and distributed them as follows, by order of the Board:

To the President, 100; Ex-President, Vice Presidents, Secretary, 50 each, and Chief Clerk 25—Total 225. State officials and members of the General Assembly, 287; Cook county officials, 31; City officials of Chicago, 73; Officials of State and Provincial Agricultural Societies, 97; Ex-members of your Board, 40; Political and Agricultural press (before the opening of the Fair), 133; to Secretary for correspondents, 142; Committee of Transportation, 461; For miscellaneous use of President and members during the Fair, 67. Total number issued, 2556, being 344 less than previous year.

To the President, 50; Ex-President, Vice President of the Board and Secretary each, were sent 15 carriage complimentary tickets—Total 380; State officials, members of the General Assembly, Cook county officials, Chicago City officials, Editors-in-chief of newspapers and Committee of Transportation, received 673 more, making in all of such tickets used, 1053.

In executing the order of the Board in issuing free tickets to the school children of the State for Tuesday the second day of the State Fair, I requested each Vice-President to inform me of the number they could use in their district.

To fill these orders I had printed 339,750 tickets and forwarded as follows:

To Messrs. Pearce and Schuttler	91,700
" " "	11,000
To 5th District, John Griffith	31,000
To 6th District, G. S. Haskell	17,500
To 7th District, Samuel Dysart	16,250
To 8th District, E. C. Lewis	23,000
To 9th District, John Virgin	15,400
To 10th District, D. W. Vittum, Jr	20,000
To 11th District, E. B. David	13,000
To 12th District, Allan C. Rush	5,400
To 13th District, J. W. Judy	17,000
To 14th District, Lafayette Funk	5,500
To 15th District, E. E. Chester	15,500
To 16th District, Joseph Skeavington	9,300
To 17th District, David Gore	7,000
To 18th District, D. B. Gillham	10,000
To 19th District, B. Pullen	10,000
To 20th District, J. M. Washburn	11,000

A condensed notice of the important and useful instruction to be acquired at the Fair was printed on the back of each ticket.

Sixty-five thousand of these tickets were collected at the gates of the Fair on the day named thereon and a large number of young hearts made happy for the day by being admitted without tickets. Who can foretell the value of the lesson learned on that occasion by the buoyant youth? The future alone can answer.

We should endeavor in our generation to cultivate human plants that ripen in the next. Some complain at their being admitted into the Fair grounds on account of their annoying mischief. The child that has not the elements of fun and mischief born in it is generally a useless creature at maturity as a helper in the progress of human events. It is only a selfish and cold-hearted adult that would pluck even a bud of happiness from the heart of a child.

The Illinois State Board of Agriculture has taken the lead in many important measures in its line as an educator of the people, but I feel that no step has ever been taken by you that has as much advancement or will produce as good results as that of admitting to your exhibitions free those who in a short period of time will fill positions you now occupy. Our receipts were largely increased over the corresponding day at previous fairs, and I hope the Board will continue in future years to say to the school children of our State, come and spend a day with us at the Fair and be happy. It would be impossible to conduct a Fair without using wagon and helpers' tickets.

I called the atttention of the Board to the abuse of those tickets in my first annual report and rules were adopted with a view of correcting it, but I regret very much to be compelled to report the remedies were without effect at the last Fair. Boys were detected offering helpers' tickets for sale outside of the gates at half the price of admission tickets. A gentleman with a fine carriage and three ladies attempted to gain admission on a wagon ticket for himself and helpers' tickets for the ladies.

These tickets were properly stamped and had been given out by members of the Board

Reform in the abuse of them must first commence within your Board. Why should you cry "stop thief" to the outside world when the means whereby your treasury is robbed is furnished by the too liberal use of these tickets by your own members.

No ticket can be invented which the public will not abuse if suffered to get them into their hands.

Tickets sold by Treasurer during the State Fair were as follows:

Kind.	Number.	Value.
Season tickets	632	$948 00
Adult admission	38,940	19,475 00
Children's tickets	1,520	380 00
Carriage tickets	1,300	650 00
McCormick Manufacturing Co	182	91 00
Total	42,584	$21,544 00

Being gross receipts as per settlement with Treasurer.

Individual accounts of members, giving number and kinds of tickets used by each:

Name.	Complimentaries	Carriage complimentaries	Meal	Helpers	Wagon	Night	Committeem'n	Press	Railroad employés	Season complimentaries returned	Carriage complimentaries returned
John Landrigan	100	50	110								
J. R. Scott	50	15									
S. D. Fisher	50	15	118							35	
C. F. Mills	25										
J. I. Pearce	50	15	13	21							
P. Schuttler, per Conrad	50	15	63	2,479	59	91					
H. G. Savage	50	15	118	190			18				
J. P. Reynolds	50	15	73				12			42	15
J. Griffith	50	15	78	2		72					
Geo. S. Haskell	50	15	125	105	12		20				
S. Dysart	50	15	41								15
S. Dysart, office			57	8							
S. Dysart, gates			316								
E. C. Lewis	50	15	106	27			31				
John Virgin	50	15	100	1		978					
D. W. Vittum, Jr.	50	15	128	12		59	23		505	4	11
E. B. David	50	15	22	41				500			
A. C. Rush	50	15	52	13			5				
J. W. Judy	50	15	50								
L. Funk	50	15									
E. E. Chester	50	15	48	125	3						
J. Skeavington	50	15	117	51	3		6			15	15
D. Gore	50	15	87	25		50	44				14
D. B. Gillham	50	15	275	135						10	14
B. Pullen	50	15	59		1						
J. M. Washburn	50	15	83	1,573	38	570					
J. W. Bunn			130								
Total	1,225	380	2,369	4,808	116	1,820	159	500	501	106	84

RECOUNT OF TICKETS DURING STATE FAIR, 1884.

	September......	Season..........	Single..........	Carriage	Childs'...........	Press Complimentaries.........	Helpers..........	Committeemen...	Night	Meteorological ..	Secretaries	Presidents	Delegates........	R. R. Employes ..	McCormick.......	Crop correspondent..........	Complimentaries.	Wagon	Carriage complimentaries......
Monday.........	8	210	346	23	6	15	10	3	175	..	..	..	..	....	....	....	..	..	....
Tuesday.........	9	632	5,513	294	77	22	535	29	278	2	1	4	10	5	12	13	..	..	....
Wednesday	10	652	5,925	132	247	24	681	24	331	..	10	8	52	15	15	25	..	..	....
Thursday	11	644	14,388	332	491	36	991	6	267	1	..	4	2	91	75	22	..	..	....
Friday	12	567	9,769	325	369	18	1,046	2	172	..	2	3	4	209	66	12	1	1	1
Saturday........	13	509	2,900	191	323	20	745	7	31	..	..	..	2	145	14	2	11	..	1
Total	..	3,214	38,841	1,297	1,513	135	4,008	71	1,254	3	13	19	70	465	182	74	12	1	2

RECAPITULATION.

Season tickets sold..........	632	Coupon recounted.... ..	3,214	Missing.......	578
Adult admission tickets....	38,950	" "	38,841	"	109
Childs' admission tickets...	1,520	" "	1,513	"	7
Carriage admission tickets.	1,300	" "	1,297	"	3
Meal tickets issued	2,369	" "	2,358	"	11
Helpers' tickets issued......	4,808	" "	4,008	"	800
Wagon " "	116	" "	1	"	......
Night " "	1,820	" "	1,254	"	566
Committee tickets issued...	159	" "	71	"	88
R. R Employes tick's issued	501	" "	465	"	36
Press tickets issued..........	500	" "	135	....	......
President Agricultural Fairs	....	" "	19	....	......
Secretary " "	....	" "	13	....	......
Meteorological Reporters...	....	" "	3	....	......
McCormick......................	....	" "	182	....	......
Delegates	....	" "	70	....	......
Crop Correspondents.........	....	" "	74	....	......
Carriage Complimentaries..	....	" "	2	....	......

Money collected at night by gatemen, $67.50. Tickets were purchased from the Treasurer for the amount, and put into the boxes.

I gave permission to McCormick Manufacturing Co. to issue cards to their agents inviting them to attend the Fair, on condition that the company redeem all collected at the gates at 50 cents each. One hundred and eighty-two (182) of these cards were taken at the gates and a check for ninety-one dollars ($91.00) was given your Treasurer.

FAT-STOCK SHOW—NOVEMBER, 1884.

The tickets to be used at that exhibition I had printed and delivered to the Treasurer of the Exposition Company by the time specified in your contract. I had printed 55,000 school children tickets, with a brief statement of the attractions of the Show on the back of each ticket. These tickets were sent to the Board of Education of the city of Chicago and delivered by them to the schools of the city for distribution.

From early morning to night on the day set apart for the children almost an unbroken column of the enterprising youngsters continued to enter and depart from the building.

Thousands of the little ones who visited the Show the previous year were there again, deeply interested in what they could see.

The novelty of the first visit was gone, and the quiet, good behavior of the last visit was conclusive evidence that they came there to admire the beautiful animals and drink from the fountain of knowledge.

For aught we know, from among those enthusiastic boys there on that occasion may in the near future come the men who will have great influence in the live-stock interests of our country.

Two thousand complimentary tickets were printed for use of the Fat-Stock Show. As per rule of the Board, they were distributed as follows:

President, 50; ex-President, Vice-Presidents and Secretary, 20 each; Chief Clerk, 10; total, 500. By order of the President, 400 more were sent to the Vice-Presidents for the use of the press in their districts. State officials and members of the General Assembly received 287; Cook county and Chicago city officials, 61; Officers of the State agricultural societies and ex-members of your Board, 27; political and agricultural press of Chicago, 98; Committee of Transportation used 401; to visiting representatives of the press during the Show, 47—a total of 1,807, being 193 less than used at the Show of 1883.

The following table shows the number of tickets sold by the Exposition Company and recounted:

	November—	Season.	Adults'.	Child's.	RECOUNT.	
					Adults'.	Child's.
Tuesday	11	27	1,340	40	1,338	39
Wednesday	12	23	2,090	46	2,084	45
Thursday	13	16	3,170	64	3,157	61
Friday	14	7	3,100	79	3,092	80
Saturday	15	....	4,320	281	4,277	276
Monday	17	7	2,280	66	2,298	67
Tuesday	18	1	3,325	76	3,318	79
Wednesday	19	....	2,175	57	2,174	57
Thursday	20	5	1,191	15	1,183	14
C. F. Mills sold at Springfield	....	51	....	....	....	....
Total	....	137	22,991	724	22,921	718

Result of recount shows 70 adult and 6 child's tickets missing.

SUMMARY.

Whole number tickets sold and receipts:

137	Season tickets	@ $1 50	$205 50
22,991	Adult tickets	@ 25	5,747 75
724	Children's tickets	@ 15	108 60
	Gross receipts		$6,061 85

CONCLUSIONS.

As one of the delegates appointed to represent your Board at the National Fair Association, held in St. Louis December 3 and 4, 1884, I can report that the subject of free tickets at fairs was carefully considered, and the system recommended was as follows:

Season complimentaries only to admit gentleman and lady.

Helpers' tickets to be printed with a coupon for each day of the Fair.

Exhibitors' tickets, good during the exhibition, to be sold only to exhibitors, and the sale of season tickets to visitors to be abandoned.

I would respectfully recommend to the consideration of your Board on the subject of tickets the following:

First—Adhere strictly to the rule of limiting season complimentary tickets to gentleman and lady.

Second—There are cases where the carriage complimentary as used at the last State Fair, seems to be an actual necessary accompaniment to the season complimentary, but I am of the opinion that such cases should be met only by the President and Committee of Transportation, and in the future only they should be authorized to issue carriage complimentary tickets.

Third—It seems almost incredible to think that at the grand exhibition of your last State Fair only 632 persons or firms made entries, yet that number comprises all the season tickets sold by the Treasurer.

Therefore I think it better to adopt the name of Exhibitors' tickets and to furnish them only to parties making entries.

Fourth—In the helper and wagon ticket I can see no advantage in adopting the coupon system. They would not protect your treasury or be less liable to abuse than the kind used for years by your Board.

By the custom in practice of giving out these tickets during the Fair, there is no means of knowing the department from which the excess of liberality comes, neither can any superintendent know that those to whom he has in good faith given such tickets are abusing his confidence.

In view of these facts I would recommend the Board adopt a rule requiring helper tickets to be printed for each day of the Fair on different colored paper; and further, that all superintendents procure an autograph stamp and stamp all such tickets given out by them on the back, and that the Superintendent of Tickets be instructed not to honor at the gates helpers' tickets not thus stamped. By this method when the abuse of that class of tickets was detected at the gates or elsewhere the department from whence the tickets were issued would be shown by the stamp and enable the superintendent thereof to investigate the fact.

Wagon tickets, good for the exhibition, should only be issued by the General Superintendent because such teams are required to pass the gates very frequently.

All other wagon permits should be for single admission and taken up each time at the gate.

I had abundant evidence that these tickets were abused at the last Fair. In addition to these changes in the manner of issuing the ticket named, I would advise the arranging of special gates in a more retired part of the ground from the main entrance, and require all helpers on foot or in vehicles and supply teams to enter the ground by this gate.

Fifth—The system of sending coupon invitations to the press, and correspondents of the Secretary's office for the State Fair, should in a rational manner be adopted for the next Fat-Stock Show. And further that the invitation should include lady. It is hardly consistent with modern customs and civility to refuse that privilege on an invitation.

SAMUEL DYSART.

Motion of Mr. Dysart adopted,

That a committee of three be appointed to consider and report upon the awards made on miscellaneous entries at the late Fair.

The President appointed as said committee Messrs. Haskell, Funk and Skeavington.

On motion of Mr. Reynolds,

The Board adjourned to 2:30 P. M.

AFTERNOON SESSION.

The Board met as per adjournment.

Present—President Landrigan, ex-President Scott, Vice-Presidents Pearce, Reynolds, Griffith, Haskell, Dysart, Lewis, Vittum, David, Rush, Judy, Funk, Chester, Skeavington, Gillham, Pullen and Washburne.

Motion of Mr. Dysart adopted,

That a committee of three be appointed to award premiums on the exhibit of seed corn.

The President appointed as said committee, Messrs. Dysart, Chester and Pullen.

Motion of Mr. Haskell adopted,

That the sum of five thousand dollars ($5,000) appropriated by the State for premiums for the State Fair and Fat-Stock Show, be apportioned as follows: Four thousand dollars ($4,000) to the State Fair and one thousand dollars ($1,000) to the Fat-Stock Show.

The following protest and defense were read:

DAVIS SEWING MACHINE COMPANY,
vs.
DOMESTIC SEWING MACHINE COMPANY.

OFFICE OF THE DAVIS SEWING MACHINE COMPANY,
CHICAGO, Sept. 12, 1884.

To the State Board of Agriculture:

GENTLEMEN—In pursuance of our notice to Mr. H. G. Savage, Superintendent of the department Class K—Textile Fabrics—we respectfully submit our protest concerning and against the finding of the committee on Lot 117, in the award of the premium No. 1,013, offered thereunder.

The premium was offered "to the largest, best and most attractive display" of sewing machine work, &c.

We complain that the award of the committee was *manifestly unjust*, and we submit the following facts as the foundation of our complaint and protest:

First—The aggregate amount and number of articles exhibited by us under the entry in question, largely exceeded that of any competitor. In these respects it was more than double that shown by the Domestic Company, to whom the premium was awarded.

Second—Our exhibit contained not less than four times as many different lines of sewing machine work as that of the Domestic Company, to whom the premium was awarded. Three distinct and complete lines were in our exhibit, without which a sewing machine would be practically of little value, and of which not a single article was shown by the Domestic Company.

Third—The quality of the work shown by us was in all respects at least equal to that of the exhibit of our competitors. We claim that it was superior throughout.

We submit, therefore, that the award of the committee was clearly contrary to justice in the several points which were properly before them for consideration, and as a matter of simple right to ourselves, and that the intentions of the Association may be faithfully carried out, we respectfully ask that the award of the committee should be withheld, and that we should be given the earliest practicable opportunity of introducing to the Board the evidence of competent and disinterested witnesses, in substantiation of the above facts.

Yours respectfully,

(Signed) THE DAVIS SEWING MACHINE CO.
J. B. COLLINS, *Manager*.

Joseph B. Collins, being duly sworn, says all the above facts are true to the best of his knowledge and belief.

(Signed) JOSEPH B. COLLINS.

Supscribed and sworn to before me this the 12th day of September, A. D. 1884.

(Signed) JAMES P. LOWE, *Notary Public*.

DOMESTIC SEWING MACHINE COMPANY,
180 STATE STREET, CHICAGO, Sept. 30, 1884.

To the Honorable State Board of Agriculture, State of Illinois:

S. D. FISHER, *Secretary*.

GENTLEMEN: Your favor of 20th inst. received. We have carefully noted the protest filed by the Davis Sewing Machine Co., and beg leave to submit the following reasons why the award as made by the committee should by confirmed:

1st. The committee were the only persons who carefully examined our entire exhibit, hence the only persons who could competently pass upon its relative merits.

2d. The arrangement of our exhibit, owing to its largeness and the great variety of different lines of work to be displayed in a limited space, was such that no person or persons unless conducted through the display by a person familiar with the arrangement, could see the entire exhibit or inspect it closely enough to intelligently pass upon its real merits.

3d. That we did not at any time show our entire exhibits to any person or persons except the committee, hence any statements regarding the relative merits of our exhibit must be made from a superficial or cursory examination and therefore unreliable and inaccurate.

4th. That the sustaining of the protest would be a gross injustice, a serious reflection upon an intelligent and conscientious committee and a radical deviation from the characteristic fairness of your honorable body.

Yours very respectfully,

DOMESTIC SEWING MACHINE CO.
BY JOHN W. THOMPSON, *Manager*.

STATE OF ILLINOIS, } ss.
COOK COUNTY. }

John W. Thompson, being duly sworn, says all the above facts are true to the best of his knowledge and belief.

JOHN W. THOMPSON.

Subscribed and sworn to belore me this 2d day of October, A. D. 1884.

LYMAN M. PAINE, *Notary Public*.

Mr. Haskell made a statement of facts in the case.

Motion of Mr. Dysart adopted,

That the protest be declared not sustained.

The following protest and defense were read:

F. M. BAUDER *et al.*
vs.
E. W. BRYANT, PRINCETON, ILL.

CHICAGO, September 13, 1884.

MR. JOS. SKEAVINGTON, *Superintendent Class G, Farm Products.*

We, the undersigned, exhibitors of corn for the northern division of Illinois, do enter protest against the award of second premium in lot No. 99, entry 1½, premium 617, shown by E. W. Bryant, of Princeton, Ill., for the following reasons: *First*—His corn was not on the ground and opened for exhibition until Wednesday evening, September 10, and was packed for removal Friday afternoon, and we do not believe he exhibited in good faith.

H. P. EDMONDS,
L. F. LEONARD.

Second—He offered to trade his bushel of white corn with the man who had first premium on yellow corn, and offered fifty dollars ($50.00) additional, as he could fill the order better with yellow corn than with white corn.

F. M. Bander,
John J. Hunt.

State of Illinois, }
Cook County. } ss.

Subscribed and sworn to before me this 13th day of September, A. D. 1884.

[SEAL] Willard L. Gillham, *Notary Public.*

Princeton, Ill., October 14, 1884.

Mr. S. D. Fisher:

Dear Sir—I have been very busy and short of help since I received your letter with protest, so have delayed answering until now. Now, their charges are all true, every word of them, except not showing in good faith, but I think I can satisfy the Board that I won the premium fairly and am entitled to it. In the first place I shipped my corn, five bushels, by freight. Had it billed to be delivered at the Fair ground. Also our agent said it would be delivered. I went to Chicago, Monday afternoon, and went out to the Fair ground Tuesday morning early expecting to find my corn there. I went to the Burlington office on the ground and enquired after it. They said a train had just come up with some freight, but my box had not come; probably it would be on the next train in about two hours. So I waited, but when that train came there was no corn. They said there would be another train about noon, so I waited again. The man in charge said if my corn was billed to the Fair ground it would certainly come, and he expected another train about two o'clock, but that did not bring it. Then I had them telegraph to the freight depot and found it was there. Then I asked him when they could send it up. They said Wednesday night, for two dollars ($2.00). That was too late, so I went over to Brink's express and gave them my order, but they said they could not start it before eight o'clock Wednesday morning and would have it up by ten o'clock. I told them, "all right;" to bring it. Well, ten o'clock came and no corn. I probably went there to see about it fifty times, and had a notion to hire a team and go after it, but was afraid it would be on the road and I would miss it and have all my trouble and expense for nothing, so I waited and about 4 o'clock it came.

In the meantime I went to the Superintendent and told him the circumstances, and he kindly postponed passing on the corn until Thursday morning. The space for seed corn was pretty well filled up before mine came, so I had to lay it out on the table clear up to the door on the west side of the building, so when we exhibited I had to get baskets and carry my corn all down, two baskets of a kind, to the Superintendent's office at the southeast corner of the building, and had no chance to arrange it to advantage. Most of the others had their's strung on wires. The one that took the first premium had only a basket full and had his best ears on top. The judges, instead of looking at the whole basket full, turning it out, simply looked at an ear or two on top, which was probably all that was necessary, but we might all of us have brought only two or three ears apiece. But that I do not care anything about. Well, we showed, and they awarded me the second premium on my white corn. When they got through I turned to the man that took the first premium and in a joking way said, "Let us trade. I give you fifty dollars ($50) and take the first and you take the second premium, as I have more yellow corn to pick from than white." Now any man of common sense would know that this was an impossible thing to do, besides being very foolish in the man that took the first. Well, enough of that! Now for the third charge—my taking away the corn Friday afternoon. I was staying in the city at quite an expense, and not having much money with me, I went to the Superintendent and asked him if he would not let me pack up and go home. He said he had nothing to say about it; that I would have to go to the President for a permit, so I went to the President's office and he was not in. A gentleman said he was out at dinner. So I went in to dinner and met him coming out. I told him I had some seed corn there on exhibition that I would like to remove that day, as our county fair began the next Tuesday and I was anxious to get home. He said, "All right. Come to my office or anywhere you can find me and I will give you a permit." So when I was through dinner I went to his office. He was in and had just written a permit for a man to take away a car-load of horses and another one to take away some machinery. So I spoke to him and he wrote me a permit. I gave it to the Superintendent. I then went to Brink's express and learned from them that unless I shipped it Friday night they thought it very doubtful if they could take it before Tuesday. So I went back and saw the Superintendent, and told him what they said. He said he wished I would leave it, so I left it as late as I could and get it boxed that night, as Brink's express said they would call for it at five o'clock. As for showing in good faith, I would say it is hardly likely that I would spend the best part of two weeks selecting corn for fun.

I planted five or six varieties last spring, on new ground, so as to have some good specimens. I will send you a sample of a new variety, the first grown in the State. Also a notice from the paper of it on the Board of Trade in Chicago. I have about one hundred bushels of it. Hoping the above will prove satisfactory, I remain

Respectfully yours,

E. W. Bryant.

Mr. Skeavington, Superintendent of Class G, made a statement of the facts in the case.

Motion of Mr. Haskell adopted,

That the protest be declared not sustained.

Mr. Haskell made the following report as Chairman of the Committee on the recommendations of committees on miscellaneous entries at the late Fair, which, on motion of Mr. Gillham, was adopted.

MISCELLANEOUS AWARDS.

To the State Board of Agriculture:

The committee suggest for the approval of the Board the following recommendations made at the late Fair by the awarding committees on the miscellaneous entries in the several classes.

The superintendents of the departments named below concur in the recommendations made by the committees.

LIST OF MISCELLANEOUS AWARDS.

ILLINOIS STATE FAIR, 1884.

CLASS G—FARM PRODUCTS.

JOS. SKEAVINGTON, *Superintendent.*

LOT 98—GRAINS AND SEEDS.

Display of Grains, Grasses, Millets and Straw:
D. Woodman, Paw Paw, Mich .... Silver Medal.

CLASS H—HORTICULTURE AND FLORICULTURE.

GEO. S. HASKELL, *Superintendent.*

LOT 103—FLOWERS AND PLANTS.

Revolving Flower Stand:
B. H. Messler, Canton .... High Commendation.

Transplanting Trowel:
F. V. Abbotts, Chicago .... High Commendation.

LOT 105—CUT FLOWERS, FLORAL DESIGNS, ETC.

Preserved Natural Flowers:
Mrs. J. H. Hewitt, Chicago .... High Commendation.

Skeleton Leaves:
Mrs. J. H. Hewitt, Chicago .... High Commendation.

Display Window Plants:
Mrs. M. H. Thurston, Chicago .... High Commendation.

CLASS I—ARTS.

J. IRVING PEARCE, *Superintendent.*

LOT 109—FINE ARTS.

Wax Statuary:
Mrs. Mary A. Horn, Chicago .... High Commendation.

Pencil Drawing, original design:
Ida R. Fuller, Chicago .... High Commendation.

Portraits in Pastile:
Mrs. J. W. Bridgman, Chicago ....High Commendation.

Landscape in Pastile:
Mrs. J. W. Bridgman, Chicago..High Commendation.

Autumn Leaves in Pastile:
Mrs. J. W. Bridgman, Chicago ....High Commendation.

Crayon Work:
Louis Marxsen, Chicago..Silver Medal.

CLASS K—TEXTILE FABRICS.

H. G. SAVAGE, *Superintendent.*

LOT 112—MANUFACTURED GOODS.

System for fitting Ladies' and Children's Garments:
Mrs. M. S. Schafer, Chicago ....Diploma.

Extermination Toilet Soap:
Maggie Carmean, Chicago..High Commendation.

Zephyr Work Wreath:
Amelia Berning, Oak Park..High Commendation.

Worked Motto:
Amelia Berning, Oak Park......................... ....High Commendation.

Bead Work:
Amelia Berning, Oak Park..High Commendation.

Fancy Needle-work:
Amelia Berning, Oak Park..High Commendation.

GEO. S. HASKELL,
JOS. SKEAVINGTON,
LAFAYETTE FUNK.
Committee.

The following communication from the Missouri State Board of Agriculture in reference to the appointment of Hon. N. J. Coleman, of St. Louis, as U. S. Commissioner of Agriculture, was read, and on motion of Mr. Reynolds ordered placed on file:

MISSOURI STATE BOARD OF AGRICULTURE,
COLUMBIA, MO., Nov. 29, 1884.

HON. S. D. FISHER, *Secretary State Board of Agriculture:*

DEAR SIR—By a resolution of the Missouri State Board of Agriculture, drawn with the belief that there will soon be a change in the office of Commissioner of Agriculture, the incoming President will be asked to appoint Hon. N. J. Coleman to the office of the United States Commissioner of Agriculture.

Col. Coleman has devoted an active life to the furtherance of the material, social and educational interest of the farmer. If Col. Coleman secures the position he will bring to the office zeal, energy, broad experience and comprehensive views and purposes.

It seems fitting that the West should now be represented in this position, and by one who, by experience, geographical position and broad views is capable of acting in the interest of the agriculture of the whole country. Col. Coleman has been the presiding officer of the most important farm organization of the Mississippi Valley, thus receiving the confidence of the farm interest. These same interests made him Lieutenant Governor of this State in the past. As Col. Coleman is a member of this Board, I am, as its Secretary, instructed to communicate with you, and to say that any assistance the members of your State Board of Agriculture may render Mr. Coleman in securing the position our Board asks for him, will be thankfully acknowledged.

Yours most respectfully,
J. W. SANBORN, *Secretary.*

Mr. Funk introduced the following resolution, which was adopted on motion of Mr. Haskell:

Resolved, That the members of the Illinois State Board of Agriculture be and are hereby requested to write their respective members of Congress, urging them to co-operate with the committee appointed by the National Cattle Breeders' Association in securing such legislation as will tend to protect our cattle interests from contagious diseases and the unjust discrimination made against our cattle in foreign markets.

Motion of Mr. Vittum adopted,

That the Board appoint a delegate and alternate delegate to attend the meeting of the National Convention of Swine Breeders, to be held at Washington, D. C., January 14, 1885, and that the expense incurred be paid out of the treasury of the Board.

The President appointed as said delegate, Mr. Gore, and alternate, Mr. David.

Motion of Mr. Gillham adopted,

That a committee of three be appointed to investigate the charge of nineteen hundred and six dollars and seventy-seven cents ($1,906.77) made against the State Board of Agriculture by citizens of Chicago, for fixing up the Fair grounds for the accommodation of the State Fair in 1884.

The President appointed as said committee Messrs. Gillham, Reynolds and Pearce.

Mr. Gillham introduced the following resolutions, which were adopted on motion of Mr. Reynolds:

WHEREAS, Hon. Peter Schuttler and Hon. H. G. Savage have retired from service as members of the Illinois State Board of Agriculture; and

WHEREAS, They have, by their demeanor and earnest devotion to the advancement of the industrial interests of the State, invited the esteem and gratitude of their co-laborers: now therefore be it

Resolved, That the sincere thanks of the Illinois State Board of Agriculture are due and hereby tendered Messrs. Schuttler and Savage for their valuable services in connection with the work of the Board, and that they be assured of the best wishes of their associate members for their future prosperity and usefulness.

Resolved, That the Secretary of the Board forward to each of the gentlemen named a copy of this preamble and resolution, and that they be spread upon the record.

On motion of Mr. Reynolds,

The Board adjourned to 9 o'clock A. M. to-morrow.

DEPARTMENT OF AGRICULTURE,
SPRINGFIELD, January 7, 1885—Wednesday, 9 o'clock A. M.

Board met as per adjournment.

President Landrigan in the chair.

Present—President Landrigan, Vice-Presidents Pearce, Reynolds, Griffith, Dysart, Lewis, Virgin, Vittum, David, Rush, Judy, Funk, Chester, Skeavington, Gore, Gillham, Pullen and Washburn.

The minutes of yesterday's session were read, and, on motion of Mr. David, approved.

The Treasurer made the following reports, which were received and approved:

TREASURER'S REPORTS.

State of Illinois,

In Account with JOHN W. BUNN,

Treasurer Illinois S Board of Agriculture.

	Dr.			
1884.				
January 5.	To unexpended approp'n acc't Sec'y's salary..	$366 70		
	“ “ “ “ Clerk hire......	150 00		
	“ “ “ “ Curator..........	300 00		
	“ “ “ “ Museum..........	1,247 59		
	“ “ “ “ Library..........	1,591 31		
	“ “ “ “ Office expenses	45 14		
			$3,700 74	
July 1.	To amount rec'd from State, account Fair and Fat-Stock Show premiums..................	$5,000 00		
	“ amount rec'd from State, account Secretary's salary..................................	2,400 00		
	“ amount rec'd from State, account clerk hire..................................	1,500 00		
	“ amount rec'd from State, account Curator.	600 00		
	“ amount rec'd from State, account Porter..	600 00		
	“ amount rec'd from State, account Museum.	300 00		
	“ amount rec'd from State, account Library.	400 00		
	“ amount rec'd from State, account office expenses	1,200 00		
	“ amount rec'd from State, account crop statistics..................................	1,200 00		
			$13,200 00	
	To amount appropriated for Agricultural Societies, 1884		7,900 00	
				$24,800 74
	Cr.			
	By salary, Secretary..................................	$2,400 00		
	“ “ Clerk	1,500 00		
	“ “ Curator..................................	600 00		
	“ “ Porter	600 00		
	“ Museum..................................	486 45		
	“ Library..................................	313 67		
	“ Office expenses	1,200 20		
	“ Crop statistics..................................	1,196 00		
	“ Premium account, Illinois State Fair and Fat-Stock show..................................	5,000 00		
			$13,296 32	
	By unexpended approp'n, salary Secretary....	$366 70		
	“ “ “ “ Clerk..........	150 00		
	“ “ “ “ Curator......	300 00		
	“ “ “ Museum	1,061 14		
	“ “ “ Library	1,677 64		
	“ “ “ Office expenses......	44 94		
	“ “ “ Crop statistics.......	4 00		
			3,604 42	
	By each of the agricultural societies located as follows, $100 for fairs held in 1884: Camp Point, Belvidere, Mt. Sterling, Princeton, Mt. Carroll, Champaign, Flora, Charleston, Robinson, Toledo, Sycamore, Clinton, Farmer City, Wheaton, Paris, Albion Effingham, Vandalia, Benton, Avon, Shawneetown, Carrollton, Warsaw, Carthage, Elizabethtown, Biggsville, Cambridge, Watseka, Carbondale, Murphysboro, Newton, Jerseyville, Galena, Warren, Kankakee, Yorkville, Knoxville, Libertyville, Mendota, Fairbury, Atlanta, Lincoln, Decatur, Carlinville, Salem, Wenona, Marengo. Woodstock, Bloomington, Aledo, Hillsboro, Jacksonville, Sullivan, Rochelle, Pinckneyville, Pittsfield, Golconda, Chester, Port Byron, Hillsdale, Harrisburg, Springfield, Rushville, Shelbyville, Toulon, Wyoming, Belleville, Delavan, Mackinaw, Anna, Jonesboro, Hoopeston. Monmouth, Albany, Morrison, Sterling, Marion, Rockford, El Paso..................................		7,900 00	
				$24,800 74

Springfield, January 6, 1885.

JOHN W. BUNN, Treasurer.

ILLINOIS STATE BOARD OF AGRICULTURE,

IN ACCOUNT WITH JOHN W. BUNN, TREASURER.

	STATE FAIR.			
	DR.			
1884.				
Jan. 5.	To balance		$23,743 70	
July 1.	“ amount received from State for premiums		4,000 00	
	“ “ “ Fair 1884		21,634 00	
	“ “ “ speed-entrance		2,300 00	
	“ “ “ stalls and pens		975 00	
	“ “ “ permits		6,170 00	
	“ “ “ from A. Hurlburt		285 00	
	“ “ “ for straw		39 25	
	“ “ “ for lumber		200 00	
	“ S. D. Fisher, State Statistical Agent		1,375 00	
				$60,721 95
	CR.			
	By Treasurer's salary	$600 00		
	“ Freight and express	400 50		
	“ Traveling expenses of Board	1,019 94		
	“ Hotel bills of Board	1,243 70		
	“ Meals at Fair	954 61		
	“ Assistant Superintendent at Fair	1,107 45		
	“ Clerks, Secretary's office	190 50		
	“ Clerks, Treasurer's office	290 00		
	“ Gatemen	476 20		
	“ Police	1,412 00		
	“ Music	290 00		
	“ Expenses of Departments	413 24		
	“ Construction of stalls, pens, etc	1,965 71		
	“ Labor	436 80		
	“ Livery	364 00		
	“ Straw	154 00		
	“ Entry and pen fees refunded	85 50		
	“ Speed entries refunded	175 00		
	“ Printing and stationery	1,588 99		
	“ Advertising	761 50		
	“ Insurance	15 00		
	“ Painting Museum	568 05		
	“ Committeemen	47 00		
	“ Inter-State Fair Association Membership	20 00		
	“ Secretary's salary	100 00		
	“ Clerk hire, Agnes E. DuBois	240 00		
	“ “ D. C. Hoyt	180 00		
	“ “ Crop statistics	246 56		
	“ Crop statistics, Department of Agriculture	779 29		
	“ Medals, ribbons, etc	342 85		
			$16,468 39	
	By premiums paid Class A—Cattle	$3,610 00		
	“ “ B—Horses	3,883 00		
	“ “ C—Sheep	1,485 00		
	“ “ D—Swine	1,775 00		
	“ “ E—Poultry	534 00		
	“ “ G—Farm Products	625 00		
	“ “ H—Horticulture	1,248 00		
	“ “ I—Arts	430 00		
	“ “ K—Textile Fabrics	712 00		
	“ “ L—Science and Education	800 50		
	“ “ M—Speed	4,597 50		
	By special premiums	550 00		
	“ Premiums Fair 1883	57 62		
			20,307 62	
	“ Deficit Fat-Stock Show 1884	$483 77		
	To surplus Fat-Stock Show 1883	344 38		
	By deficit Fat-Stock Show		139 39	
	“ balance		23,806 55	
			$60,721 95	$60,721 95

SPRINGFIELD, January 6, 1885.

JOHN W. BUNN, Treasurer.

ILLINOIS STATE BOARD OF AGRICULTURE,

IN ACCOUNT WITH JOHN W. BUNN, TREASURER.

		FAT-STOCK SHOW.				
		DR.				
1884. Jan.	5	To amount received Show 1884		$7,789 95		
		" " " subscriptions, Show 1884		3,670 00		
		" " " A. N. Hereford Association for premiums		875 00		
		" " " from State for premiums		1,000 00		
		" premiums, 1883, refunded		35 00		
		" defict Show 1884	$483 77			
		By surplus Show 1883	344 38			
				139 39		
		CR.				$13,509 34
		By expenses committeemen		$543 60		
		" Hotel bills of Board		754 75		
		" Assistant Superintendents		252 10		
		" Construction stalls, pens, etc		1,392 60		
		" Police		94 00		
		" Labor		369 50		
		" Lighting Exposition Building		693 75		
		" Clerks, Secretary's office		37 00		
		" Traveling expenses of Board		213 75		
		" Printing and stationery		585 75		
		" Advertising		762 95		
		" Music		233 00		
		" Slaughtering		240 00		
		" Doorkeepers		154 00		
		" Clerks, Superintendent tickets		121 50		
		" Rent, Exposition Building		606 18		
		" Sawdust		98 25		
		" Postage		76 50		
		" Sundry expenses Departments		125 78		
		" Coal		8 00		
		" Entry fees refunded		7 00		
		" Surplus 1883, refunded Union Stock Yards		344 38		
					$7,714 34	
		By premiums paid Class A—Cattle		$2,710 00		
		" " " " C—Sheep		1,020 00		
		" " " " D—Swine		1,065 00		
		" " " by Hereford Association		875 00		
		" " Show, 1883		125 00		
					5,795 00	
		DR.				
		To deficit Fat-Stock Show, 1878		$451 81		
		" " " " 1879		1,861 24		
		" " " " 1880		578 18		
		" " " " 1881		18 03		
		" " " " 1884		483 77		
		Total		$3,393 03		
		CR.				
		By surplus Show, 1882	$674 56			
		" " " 1884	344 38			
				1,018 94		
		Present deficit		$2,374 09		
					$13,509 34	$13,509 34

SPRINGFIELD, January 6, 1885.

JOHN W. BUNN, Treasurer.

On motion of Mr. Reynolds, the reports of the Treasurer were received and referred to the Finance Committee.

The Auditing Committee made the following reports, which were received, and, on motion of Mr. Lewis, adopted:

REPORT OF AUDITING COMMITTEE.

To the State Board of Agriculture:

The Auditing Committee beg leave to make the following report.

The expenses of the Board in connection with the Fair, Fat-Stock Show and Department for the past year are as follows:

State Fair	$36,776 01
Fat-Stock Show	13,509 34
Department	8,296 32
Total	$58,581 67

The several items making the above amounts appear on the appended sheets.

The Auditing Committee recommend that all contracts for labor and material not made by the purchasing agent, be made in duplicate by the member or committee authorized to make the expenditure, one copy to be filed with the Auditing Committee prior to the adjustment of the account, and the other copy to be given the contracting party. This course will enable the Auditing Committee to promptly and intelligently adjust the accounts of the Board and prevent imposition. The delay in the presentation of some of the accounts of the Board, for auditing and payment, makes much additional labor for the Committee, and it recommends some action of the Board that will remedy this evil.

The Auditing Committee also recommend that in future vouchers for the Fair and Fat Stock Show, when properly approved by the Auditing Committee, be presented to the Secretary, who shall issue his order on the Treasurer for the amount.

ILLINOIS STATE FAIR, 1884.

Dr.

To balance			$23,743 70
“ amount State appropriation, account premiums			4,000 00
“ “ received Fair, 1884			31,079 00
“ “ “ for straw			39 25
“ “ “ for lumber			200 00
“ “ “ from A. Hurlburt			285 00
“ “ “ State statistical Agent			1,375 00
PAYING ADMISSIONS.			
Number season and coupon tickets	632	$948 00	
“ single admission tickets—adults	39,130	19,565 00	
“ “ “ “ —children's	1,520	380 00	
“ carriage tickets	1,300	650 00	
“ McCormick's tickets	182	91 00	
BOOTH PRIVILEGES, ETC.			
To amount received, account booths, permits, etc		6,170 00	
“ “ “ for stalls, pens, etc		975 00	
“ “ “ speed		2,300 00	
Total receipts at gate and for permits		$31,079 00	
NON-PAYING TICKETS ISSUED.			
Number complimentaries issued	1,119		
“ railroad employes tickets issued	501		
“ tickets for helpers, booths, stands, etc., issued	6,744		
“ tickets issued to crop, meteorological and newspaper reporters, and officers county fairs	244		
“ tickets other than those named above	141		
Total receipts			$60,721 95

Cr.

BY EXPENSES OF DEPARTMENT.

Class.	Assistant superint'ndents or clerks....	Traveling expenses......	Hotel bills......	Meals at Fair Grounds....	Total.........	
A—Cattle	$16 00	$3 00	$15 25	$36 50	$70 75	
B—Horses	131 00	10 25	38 25	44 17	223 67	
C—Sheep	54 00	71 95	42 50	53 33	221 78	
D—Swine	28 00	17 60	48 00	36 00	129 60	
E—Poultry	38 00	37 77	60 75	32 50	169 02	
F—Mechanics	36 00	13 30	43 00	16 00	108 30	
G—Farm Products	92 95	46 90	54 00	48 66	242 51	
H—Horticulture and Floriculture	75 00	45 70	46 25	41 66	208 61	
I—Arts	28 00	12 95	11 25	4 33	56 53	
K—Textile Fabrics	43 00	25 25	35 75	51 50	155 50	
L—Science and Education	44 00	13 25	53 45	17 33	128 03	
N—Agricultural Implements	48 50	34 36	22 25	21 00	126 11	
Marshal of the Ring	48 90	25 15	17 50	16 66	107 31	
Superintendent of Grounds	259 00	32 29	47 25	114 50	453 04	
Auditing Committee	....	2 90	57 50	....	60 40	
President's office	....	30 45	93 00	55 00	178 45	
Ex-President	....	46 50	10 00	....	56 50	
Treasurer's office	....	....	53 50	54 16	107 66	
Secretary's office	....	286 60	187 10	49 17	522 87	
Forage department	64 00	12 25	58 50	41 66	176 41	
Press department	....	44 60	38 50	7 33	90 43	
Gate department	....	101 20	100 15	165 83	367 18	
Permit and Privilege department	54 00	74 00	65 50	27 66	221 16	
Purchasing department	48 00	31 72	44 50	19 66	143 88	
Total	$1,107 45	$1019 94	$1243 70	$954 61	$4,325 70	$4,325 70

By Treasurer's salary	$600 00	
“ Secretary's “	100 00	
“ clerk hire, Department of Agriculture	1,147 06	
“ freight and express	400 50	
“ gatemen, State Fair	476 20	
“ police	1,412 00	
“ music	290 00	
“ expenses of departments	413 24	
“ construction	1.965 71	
“ labor	436 80	
“ livery	364 00	
“ straw	154 00	
“ entry and pen fees refunded	85 50	
“ speed entries refunded	175 00	
“ printing and stationery	1,588 99	
“ advertising	761 50	
“ insurance	15 00	
“ painting museum	568 05	
“ committeemen	47 00	
“ membership Inter-State Fair Association	20 00	
“ crop statistics	779 29	
“ medals, ribbons, etc	342 85	
“ premiums	20,307 62	
“ deficit Fat-Stock Show	139 39	
“ balance	23,806 55	
		56,396 25
Total	....	$60,721 95

LAFAYETTE FUNK,
J. IRVING PEARCE,
E. B DAVID,
Auditing Committee.

FAT-STOCK SHOW, 1884.

Dr.

To amount received from sale tickets, 1884			$7,789 95
" " " subscriptions, 1884			3,670 00
" " " American Hereford Association			875 00
" " " from State for premiums			1,000 00
" premium 1883, refunded			35 00
" amount deficit, 1884	$483 77		
" less surplus, 1883	344 38		139 39

BY EXPENSES OF DEPARTMENTS.

Class.	Assistant superintendents or clerks	Awarding committees	Hotel	Traveling expenses	Total	
A—Cattle		$271 80	$18 00		$289 80	
B—Horses			21 75		21 75	
C—Sheep	$48 00	135 90	52 00	$34 25	270 15	
D—Swine	40 00	135 90	24 50	10 70	211 10	
Permit and Privilege Dept.	17 10		10 00	15 00	42 10	
Marshal of Ring			26 50		26 50	
Superintendent of Grounds	129 00		12 75	33 65	175 40	
Auditing Committee			54 25	10 65	64 90	
Secretary's office	37 00		156 25	5 50	198 75	
President's office			46 00	8 90	54 90	
Ex-President			13 00	43 75	56 75	
Forage department	18 00		61 25	5 50	84 75	
Superintendent of Tickets	121 50		159 75	35 05	316 30	
Purchasing department			13 00		13 00	
Vice-President 5th district			21 75		21 75	
" 6th "			4 00		4 00	
" 12th "			22 50		22 50	
" 15th "			18 00		18 00	
" 16th "			19 50	10 80	39 30	
Total	$410 60	$543 60	$754 75	$213 75	$1922 70	$1,922 70

By construction stalls, pens, etc.	1,392 60	
" police	94 00	
" labor	369 50	
" rent, Exposition Building	606 18	
" lighting Exposition Building	693 75	
" printing and stationery	585 75	
" advertising	762 95	
" music	233 00	
" slaughtering	240 00	
" doorkeepers	154 00	
" sawdust	98 25	
" postage	76 50	
" coal	8 00	
" entry fees refunded	7 00	
" sundry expenses departments	125 78	
" surplus 1883 refunded Union Stock Yards	344 38	
" premiums	5,795 00	
Total	$13,509 34	$13,509 34

LAFAYETTE FUNK,
J. IRVING PEARCE,
E. B. DAVID,
Auditing Committee.

ILLINOIS STATE FAIR.

EXPENSES OF DEPARTMENTS FOR THE PAST SEVEN YEARS.

	1878	1879	1880	1881	1882	1883	1884
Class A—Cattle	$71 53	$189 62	$137 63	$96 50	$89 21	$130 80	$70 75
B—Horses	139 79	342 93	187 23	132 66	137 84	227 23	223 67
C—Sheep	83 70	115 42	123 75	80 35	65 61	159 40	221 78
D—Swine	113 20	120 07	109 33	69 30	78 33	165 45	129 60
E—Poultry	61 31	92 15	97 68	85 98	84 23	148 40	169 02
F—Mechanics	53 67	115 00	108 83	61 66	76 35	130 40	108 30
G—Farm Products	53 58	132 20	113 47	116 31	126 11	285 40	242 51
H—Horticulture—Sec. 1	85 58	178 81	100 33	64 00	128 03	242 00	208 61
H—Horticulture—Sec. 2	70 00	143 10	88 32				
I—Arts	88 00	85 30	58 25	36 33	64 58	134 00	56 53
K—Textile Fabrics	141 00	206 00	145 33	93 90	111 26	126 50	155 50
L—Science and Education	....	53 25	67 75	60 06	126 74	90 15	128 03
N—Agricultural Implements	143 83	206 58	189 42	244 85	126 54	133 41	126 11
Marshal of Ring	121 25	169 83	153 16	101 00	136 66	132 75	107 31
General Superintendent	311 83	370 50	413 50	664 68	1,154 48	659 42	453 04
Auditing Committee	314 22	527 32	483 96	436 95	555 21	68 83	60 40
Secretary's office	215 80	230 71	129 16	183 75	420 54	489 25	522 87
Treasurer's office	249 33	277 00	169 33	267 83	265 83	122 25	107 66
President's office	30 33	185 17	183 90	160 66	167 75	198 05	178 45
Reception Committee	116 00	144 25	133 08	91 07	75 00	71 50	....
Committee of Arrangements	28 50	128 50	27 67	341 93	144 00	....	....
Forage Department	84 67	122 25	155 25	68 17	139 71	184 80	176 41
Superintendent of Tickets	....	....	....	....	....	273 24	367 18
Permit and Privilege Department	....	....	....	....	....	133 25	221 16
Purchasing Department	....	....	....	....	....	128 45	143 88
Press	....	....	....	....	84 46	56 00	90 43

The Finance Committee made the following report, which was received, and, on motion of Mr. Judy, adopted:

REPORT FINANCE COMMITTEE.

To the State Board of Agriculture:

The Committee have examined the reports of the Secretary, Superintendents of Tickets and Permits, and find the receipts for the year to be as follows:

Account State Appropriations	$13,200 00
" State Fair, 1884	31,079 00
" Fat-Stock Show, 1884	11,459 95
" Hereford Special Premiums	875 00
" State Statistical Agent	1,375 00
" A. Hurlburt	285 00
" W. L. Gillham, straw	39 25
" J. H. Hall, lumber	200 00
" Cobb & Phillips, premiums returned	35 00
Total	$58,548 20

The above amounts have been properly accounted for by the Treasurer.

The Finance Committee have carefully examined the Annual Report of the Treasurer, for the year ending January 7, 1885, in connection with the approved vouchers for expenditures on file in the office of the Department, which have been compared with the warrants of the President and Secretary and premium checks.

The vouchers in amount agree with the report of the Treasurer, which we find correct and recommend for the approval of the Board.

The Finance Committee recommend that all parties authorized to receive moneys for the Board shall promptly pay the amount to the Treasurer and report the same to the Secretary, who shall enter the same on books kept in the Department for that purpose.

Respectfully submitted,

J. IRVING PEARCE,
B. PULLEN,
D. GORE,
E. CHESTER,
EDWARD C. LEWIS,
Committee.

Motion of Mr. Reynolds adopted, that the recommendations of the Finance Committee be incorporated in the rules and by-laws.

Mr. Dysart introduced the following preamble and resolution, which were adopted on motion of Mr. Pearce:

WHEREAS, Hon. M. Conrad, of Chicago, has rendered this Board and all interested in the Illinois State Fair valuable service as acting Superintendent of the Agricultural Implement Department; therefore, be it

Resolved, That the thanks of the Illinois State Board of Agriculture be and are hereby extended to Mr. Conrad for his valuable and gratuitous services during the past two years.

Resolved, That the foregoing preamble and resolution be spread upon the record and that a copy be forwarded to the gentleman named therein.

Motion of Mr. Skeavington adopted,

That a silver medal be awarded W. Woodman, Esq., of Paw Paw, Mich., for the creditable display of grains, grasses and millets on the straw, exhibited at the late Fair in the Miscellaneous Class.

Motion of Mr. Pearce adopted,

That a silver medal be awarded Louis Marxsen, Esq., of Chicago, for crayon work exhibited at the late Fair.

The following memorial, commending The World's Industrial and Cotton Centennial Exposition at New Orleans, was read:

MEMORIAL.

NEW ORLEANS, Dec. 30, 1884.

To the Honorable the General Assembly of Illinois:

The undersigned, citizens of Illinois, visitors at the World's Industrial and Cotton Centennial Exposition now in progress in this city, animated by a State pride shared in common, as we believe, by Illinoisans everywhere, especially those who reside within the boundaries of our great State, respectfully represent to your honorable bodies that the exhibits collected from various sources in the State are, as far as they go, creditable, and the educational features are not surpassed, if equalled, by any other State here represented. The exhibit made by the Illinois Industrial University is both comprehensive and instructive, indicating, in degree, the range of cereals and other agricultural products grown in the State, and showing in a highly gratifying and pronounced way our progress and position from an educational point of view; the exhibits made by the schools of Aurora, Chicago and elsewhere, reflect much credit upon those cities and the State; the exhibit in the domain of economic geology, while upon a limited scale, owing to lack of means, indicates in a measure our mineral resources; the exhibit of various woods by the Illinois Central Railroad gives the visitor an idea of the wooded wealth of our State along the line of that road, and the individual exhibit from a single farm in Alexander county is a splendid indication of its natural wealth and of the public spirit of one of its prominent citizens.

Yet we are impelled, in candor, to say that the exhibit in its entirety is very far from being a fair or just expression of the resources, wealth, commercial importance, position and prestige of Illinois among her sister States. We respectfully submit to your honorable bodies that it is in no fault-finding spirit we state for your consideration this painfully evident fact. Nor do we wish to be understood as indulging in unfriendly criticism, or as attaching blame to any source, for the situation, in connection with the exhibit of our State. With the very limited means at command, the United States Commissioner, Hon. Frank Gilbert, has done the very best that could be done; but the fact remains that our State is placed at a humiliating disadvantage in comparison with others less favored. That such is the case, calls forth from Illinoisans a universal expression of regret, accompanied with the desire that action may be taken by the General Assembly to place Illinois on a footing that shall bear some relation to her standing and importance. It is not too late nor impracticable to amplify and extend the exhibit at comparatively small cost with additions readily obtained. By supplementing the work of the United States Commissioner (now incomplete by reason of a lack of sufficient means to make it more attractive.) with exhibits easily secured, and suitable decorations, comprising a handsome pagoda, cases, tables, screens, signs and other appointments necessary to a pleasing effect, the tens of thousands of visitors from every part of the globe who shall come here during the months of February, March, April and May following may bear away with them some approximate idea of the prominence of Illinois among the States of the Union.

We would respectfully call your attention to the magnitude of this colossal exhibition, where every State and Territory of our country, and nearly every nation and prominent city on the earth is represented, and to the far-reaching results from a commercial point of view which must, of necessity, flow from this vast aggregation of the world's products and people. In the advantages to be reaped from a participation in this Exposition Illinois has an interest in common with other States and Territories. New fields and enlarged territory for American goods and manufactures of every description will be occupied by this commingling of the people of various nations, and especially of our own with those of Mexico, the Central American and South American States. Illinois should share in these advantages, and to do so she must attract attention. This she can do by the judicious expenditure of a sum of money insignificant in amount in comparison with her abounding wealth. We respectfully ask, at your hands, in order that our beloved State may be fitly represented in her exhibit here, that the sum of five thousand dollars be appropriated to this object, and your memorialists will ever pray.

(The memorial is already numerously signed, and is receiving additional signatures of Illinois visitors at the Illinois headquarters.)

Dr. L. B. Hibbard, of Highwood, offered the following resolutions, which were adopted:

Resolved, That a committee of three be appointed to present the memorial adopted by this meeting to the General Assembly, through the presiding officers of each House respectively.

Resolved, That the Governor be, and he is hereby respectfully requested to recommend to the General Assembly an appropriation of five thousand dollars, to carry out the objects set forth in the memorial.

The chairman desired the meeting to name the committee contemplated in the resolutions, and the following gentlemen were chosen for that purpose: Hons. C. A. Keller, of Mt. Vernon, W. A. Green, of Cairo, and John Virgen, of Fairbury.

S. R. White moved that a copy of the memorial and accompanying resolutions be furnished for publication to the papers in Illinois before the General Assembly meets, which was carried.

Newspapers throughout the State are requested to publish them. Adjourned.

C. A. KELLER, *Chairman*.

T. H. GLENN, *Secretary*.

Motion of Mr. Judy adopted,

That a committee of three be appointed to present a memorial to the General Assembly requesting sufficient appropriation to arrange and place on exhibit the Illinois collection at the New Orleans Exposition.

President appointed as said committee, Messrs. Judy, Gillham and Funk.

Mr. Reynolds introduced the following resolution, which was adopted on motion of Mr. Pearce:

Resolved, That the Secretary be and is hereby instructed to ship by freight, charges prepaid, to Hon. I. H. Glenn, acting Commissioner for Illinois at the World's Exposition at New Orleans, La., for gratuitous distribution and exchange, an ample supply of the volumes of the Annual Reports of this Board.

Motion of Mr. Dysart adopted,

That the premium seed corn received from the State Fair be distributed through the members of the General Assembly.

The minutes of the morning session were read, and on motion of Mr. Pullen adopted.

On motion of Mr. Judy the Board adjourned *sine die*.

JOHN LANDRIGAN,
President.

S. D. FISHER,
Secretary.

APPENDIX.

SECRETARY'S REPORT.

To the Illinois State Board of Agriculture:

Complying with the by-laws of the Board, requiring the Secretary to make, at the January meeting of each year, a report of the workings of his office, I beg to submit the following brief report:

The correspondence of the office shows an increase in the number of letters written over that of any previous year.

A large number of letters have been received from other States and Territories, the writers seeking information upon special subjects or asking for the statistical and other reports issued by the Board.

It has been my pleasure to respond promptly and as far as possible give the information or book sought.

The character of our domestic correspondence and the relations existing between the Department and the local agricultural organizations of the State, have never, in my experience during the past decade, been more pleasant than at the present time.

The action of this Board in securing the change in the law, as passed by the last General Assembly, by which the system of County Agricultural Boards was abolished and the placing of every society upon an equality—one with another—in obtaining State aid, seems to have been fully appreciated by all the societies in the large number of counties having more than one agricultural organization.

It seems unnecessary to mention in this report the subjects that are to be specially reported upon by the standing committees appointed by the Board.

In compliance with section 4, of the by-laws of the Board, the following report is made.

The receipts during the past year for exhibitors' tickets, stall and pen fees, and from all other sources, are as follows:

STATE FAIR.

By stall fees	$975 00
" season tickets	765 75
" entrance fees—speed ring	2,300 00
Total	$4,040 75

ACCOUNT FAT-STOCK SHOW.

By season tickets	$79 50
" stall and pen fees	925 00
Collected sub. to premium fund	3,670 00
Total	$4,674 50

MISCELLANEOUS SOURCES.

From Cobb & Phillips, return of overpaid premium at Fat-Stock Show of 1883	$35 00
From U. S. Dept. of Agriculture as State Statistical Agent	1,375 00
Total	$1,410 00
Making a grand total of	$10,125 25

All of which sums have been paid to the Treasurer of the Board and his receipts filed in this office.

The following is an invoice of goods received from Supt. Purchasing Department at State Fair, Chicago, September 13, 1884, which are in the custody of the Secretary, to-wit:

24	Towels.
23	Cups and chains.
5	Cups.
12	Tin wash basins.
1	Earthenware basin.
29	Buckets.
52	Cots.
15	Brooms.
2	(4-tined) Forks.
1	Scoop shovel.
19	Lanterns, (3 broke).
8	Lamps 1 (wall lamp) broken
6	Combs.
2	Paper pins.
2	Balls of twine.
1	Door knob.
7	Boxes of matches.
3	Pads of writing paper.
2	Scrap books.
	Half gross of iron rings.
39	Staples.
2	Hair brushes.
2	Coils 5-8 inch rope.
3	Coils of inch rope.
1	Canvas express bag.
1	Butter tryer.
1	Canvas sign "Trees".
7	Straw ticks.
	Part box pens.
3½	papers tacks.
2	Lantern wicks.
2	Jack hammers.
3	Hatchets.
3	dozen pen-holders.
2	Bars of soap.
6	Glass tumblers.
2	Looking glasses.
2	Chains for locks.
17	Pad locks.
10	Inks.
75	Yards of muslin.
1	Bundle of baggage checks.
12	Rolls of toilet paper.
1	Toilet fixture.
6	Lead pencils.
2	Packages of blotters.
1	Pass book.
1	Lot of Gen'l Sup't notice cards.
1	Earthernware cup.
1	Tin water pitcher.
1	Earthen water pitcher.
2	Sprinklers.
150	feet of hose.
2	Brass faucets.
31	Chairs.
9	Tables.
1	5 gallon oil can.
1	Funnel.
7	Large boxes and chests.
1	Sign, Election.
1	Sign, Groom Tickets.
1	Sign, Purchasing Department.
8	Ticket boxes.
1	Whisk broom.
106	Double blankets.
22	Single blankets.
1	White blanket.

When the goods were loaded in the car at the Grounds for shipment to Springfield the chairs and cots were carefully counted and only 27 of the former and 50 of the latter could be found.

Property in use in the rooms of the Board and not before reported:

2	ten foot tables.
1	Wooden desk.
1	Cylinder desk.
2	Flat top desks.
1	Old style desk (in basement).
1	Carpet on main office floor.
1	Carpet on private office floor.
9	Spittoons.
1	Revolving book case.
1	Water tank.
2	Tumblers.
1	Water bucket.
2	Brooms.
2	Hatchets.
1	Mop.
1	Lounge.
2	Cane seat chairs (patent backs).
4	Upholstered chairs.
20	Board chairs (cherry).
20	Common wood seat chairs.
1	Office chair (cherry).
1	Barometer.
1	Postal scale.
1	Clock.
1	Letter press.

Also the following stored in the basement:

2	Pulley blocks from Fat-Stock Show.
2	Sets rods for measuring live stock.
1	Lot of cloth signs from Fat-Stock Show.

ELSEWHERE.

1	Set of metal dies (in care of Charles Slutenrauch, St. Louis.)
2	Aquaria—in the case State Board of Fish Commissioners.
2	Aquaria—left with Gould Bro's, Chicago.

Many of the articles above enumerated are stored in the large room in the basement under the Agricultural Museum, in which is also stored property of the State under control of the Secretary of State.

It seems proper to suggest, and urge, the importance of having a suitable room that shall be under the exclusive control of the Board, and that it be fitted up in such manner that its property may be properly cared for and be accessible at all times. If the north half of the room mentioned, or such portion of it as the Board may deem necessary for the present and future use of the Department, can be secured for this purpose, and communication be had with the room by an iron stairway, built in the northeast corner of the Museum, it would furnish ample means for protection to the property and add to the convenience of the office and the dispatch of business.

It may be stated further that the cases for holding letters and valuable papers, which should be preserved, are now nearly full, and some provision will have to be made for them elsewhere at an early day to make room for the more recent correspondence and papers of this office.

The Board made the following appropriations for the contingent expenses of the Secretary's office for the year 1884:

Clerk hire	$600 00
Crop Report	600 00
Office expenses	600 00
Total	$1,80 00

The expenditures chargeable to these accounts are as follows:

For clerk hire	$264 00
For Crop Report	579 29
For office expenses	298 00
Total	$1,141 29

ANNUAL REPORTS.

In addition to the books contained in the catalogue of the Library of the Department (and in the cases), the following volumes of the Transactions of this Board are on hand:

Year.	Volume.	Editor.	Copies on hand.
1853	1	John A. Kennicott	
1855	2	John A. Kennicott	
1857	3	S. Francis	
1859	4	John P. Reynolds	
1861	5	John P. Reynolds	
1865, '66	6	John P. Reynolds	
1867, '68	7	John P. Reynolds	
1869	8	John P. Reynolds	875
1871	9	A. M. Garland	
1872	10	A. M. Garland	50
1873	11	A. M. Garland	
1874	12	A. M. Garland	910
1875	13	S. D. Fisher	
1876	14	S. D. Fisher	20
1877	15	S. D. Fisher	40
1878	16	S. D. Fisher	2,025
1879	17	S. D. Fisher	179
1880	18	S. D. Fisher	1,040
1881	19	S. D. Fisher	106
1882	20	S. D. Fisher	960
1883	21	S. D. Fisher	998

DISTRIBUTION OF REPORTS.

The distribution of the Report of the Department is chiefly done by the Secretary of each of the several Agricultural organizations, and in counties where no Agricultural Society exists, by the County Clerks, who have, with rare exceptions, cheerfully consented to receive them, pay the freight, and place the book in the hands of those who will most appreciate them.

The reports are shipped in boxes, by freight. The shipments for the past year amount to 231 boxes. Of this number, 104 boxes of Vol. 20 were shipped early in the year, and completed the distribution of that number: the balance (127 boxes) were Vol. 21, which have been furnished to all the usual points of shipment.

In addition to the above, there have been shipped by express 880 packages, which include Premium Lists and posters of the State Fair and Fat-Stock Show, and orders from individuals for Reports and other documents issued by the Board.

COUNTY AND DISTRICT FAIRS.

The reports of Fairs of 1884 show generally a decrease in attendance as compared with the previous year, which may be accounted for by the prevailing low price of farm products and consequent scarcity of money in the country, together with the usual attractions and diversions of a Presidential campaign year.

The exhibits, however, were very creditable and more complete than usual, especially in the live stock classes, which indicate a marked increase in the attention given to pure-bred stock, an improvement particularly noticeable in the reports of the Fairs in the Southern half of the State, as will be seen in the following tables.

PERSONAL.

In closing this my tenth year as your Secretary, I take great pleasure in acknowledging the uniform courtesy and kindness that has been extended to me by each member of the Board. The arduous and increasing duties of my office have been the more easily borne by the generous and able assistance which you have promptly given as it was required.

In conclusion, I beg to make special mention of the able and faithful services of my Chief Assistant, Mr. C. F. Mills, and Miss Agnes E. DuBois, Curator of the Museum, and Mr. D. C. Hoyt, who have faithfully discharged the clerical duties assigned them.

STATE APPROPRIATIONS.

Since and including the year 1870, the munificent sum of $3,078,486 has been offered in premiums by the patrons of agriculture in this State to the enterprising people of the world, as an incentive to exhibit at our Fairs the best results in the breeding of stock, the skill of the inventor and manufacturer of labor-saving farm machinery and implements, the growing of superior specimens of agricultural products, etc.

All the citizens of the State have shared in the benefits to agriculture resulting from the holding of over one thousand (1,217) Fairs in various portions of the State during the period named, and have never questioned the wisdom of paying the limited amount appropriated to county and other agricultural societies.

It will be seen from the following exhibit that the State appropriation to these societies the past eight years is but a fraction of the amount of premiums offered by the Fair Associations:

Year.	Premiums offered by Fair Associations.	State appropriations to Co. Ag'l Boards.	Per cent. State appr. to premiums offered.
1877	$230,300	$7,100	3.08
1878	224,907	7,500	3 33
1879	241,083	7,800	3.23
1880	217,645	7,200	3.31
1881	209,802	7,000	3.33
1882	254,031	6,400	2.51
1883	248,616	6,300	2.50
884	269,649	7,900	2.93

ILLINOIS FAIRS.

The following tables give much interesting data concerning the Fairs held in this State:

ILLINOIS FAIRS—1884.

The number of Fairs held in this State in 1884 is larger than in 1883; the number of entries at the Fairs the past year has never been equalled; the amount of premiums paid in 1884 is the largest on record, with the exception of 1875.

The following table gives the number of entries and premiums offered and paid during the past fifteen years at the Fairs held in this State, as far as reported:

Year.	Number of Fairs reported.	Number of entries.	Amount premiums offered.	Amount premiums paid.
1870	56	39,188	$108,145	$85,154
1871	49	51,373	117,381	92,426
1872	51	51,793	105,396	82,989
1873	70	63,105	151,324	112,360
1874	89	89,763	206,481	145,401
1875	87	98,879	263,476	192,903
1876	93	96,648	230,250	154,043
1877	94	113,925	230,300	168,237
1878	90	108,483	224,907	154,116
1879	93	120,634	241,083	175,900
1880	88	97,893	217,645	147,473
1881	82	90.585	209,802	140,862
1882	95	107,526	254,031	177,207
1883	88	117,126	248,616	179,573
1884	90	130,426	269,649	190,368
Total	1,217	1,467,347	$3,078,486	$2,199,012
Average	81	56,823	$205,232	$146,601

ENTRIES OF CATTLE.

The following table gives the per cent. of entries of the various breeds of cattle at all the Fairs held in the State the past eight years:

Description of Cattle.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Short-Horn, per cent	70	70	64	75	61	62	58	54
Hereford, "	4	4	3	4	7	6	7	11
Devon, "	6	6	5	3	3	4	5	4
Polled Angus, "	......	......	......	......	......	1	1	......
Holstein "	4	5	5	2	5	5	4	6
Ayrshire "	2	4	4	2	4	2	1	3
Jersey "	14	11	19	14	20	20	24	22

It will be seen that there is a slight increase in the number of entries of Herefords, and a decrease in the number of entries of Short-Horns, Holsteins, Devons, Polled Angus, Ayrshires and Jerseys. Nearly four-fifths of all the cattle exhibited at the Fairs in this State the past year were Short-Horns and Jerseys—the former making 54 per cent. of all the cattle shown, the latter 22 per cent.

ENTRIES OF HORSES.

The following table gives the per cent. of the entries of the various breeds of horses at the Fairs of the State during the past eight years, so far as reported. There was a slight increase the past year in the number of entries of thoroughbred English draft horses, and a slight decrease in the number of entries of roadster Norman and French draft horses. Over half of the horses exhibited at the Fairs the past year were of the roadster type:

Description of Horses.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Thoroughbred, per cent	22	14	20	11	11	10	6	11
Roadster, per cent	48	53	44	58	57	59	57	56
Norman and French Draft, per cent	22	20	23	19	19	17	23	17
Clydesdale and English Draft, per cent	8	13	13	12	13	14	14	16

All the Fairs in the State, so far as reported, are included in the above table.

STATE FAIR.

The following table gives the amount of premiums offered by the managers of the Illinois State Fair since its organization, in 1853. It will be seen that the development has been healthy, and that each industry has received encouragement in proportion to its importance to the other interests demanding the fostering care of the organization. The aggregates of the premiums offered are as follows:

Cattle	$79,716
Horses and Mules	91,375
Sheep	27,650
Swine	28,990
Poultry	9,883
Mechanics	12,511
Farm Products	18,856
Horticulture	29,124
Fine Arts	3,244
Textile Fabrics	13,155
Natural History	8,377
Equestrianism	1,363
Education	2,791
Speed	13,940
Miscellaneous	11,926
Total	$352,900

Amount of Premiums offered by the Illinois State Fair—1853–1884.

Place of Fair.	Year	Cattle	Horses and mules	Sheep	Swine	Poultry	Mechanics	Farm products	Horticulture	Fine arts	Textile fabrics	Natur'l history	Equestrianism	Miscellaneous	Education	Total
Springfield	1853	$435	$185	$150	$105	$13	$130	$112	$154	....	$121	....	....	....	....	$1,405
Springfield	1854	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,229
Chicago	1855	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,229
Alton	1856	1,150	1,018	160	140	53	595	350	82	....	427	$180	....	$75	....	4,230
Peoria	1857	3,040	2,255	330	210	151	845	379	180	....	316	175	....	55	......	7,936
Centralia	1858	2,084	2,005	845	200	62	325	164	628	....	204	30	....	.... .	....	6,547
Freeport	1859	2,324	2,175	665	185	63	360	285	641	....	203	75	....	233	....	7,209
Jacksonville	1860	1,865	3,185	870	285	35	1,770	251	580	$130	238	386	....	731	....	10,326
Chicago	1861	2,520	4,415	1,000	795	35	1,123	528	760	424	496	475	....	671	....	13,272
Peoria	1862	1,500	1,630	720	470	36	352	279	396	....	148	240	....	328	....	6,099
Decatur	1863	1,205	1,290	720	400	36	580	454	350	....	148	120	....	378	....	5,681
Decatur	1864	1,385	2,145	830	405	36	55	618	381	....	410	300	....	375	....	6,940
Chicago	1865	1,460	2.264	1,005	410	36	105	634	654	....	461	150	....	345	....	7,524
Chicago	1866	1,460	2,320	1,145	410	38	1,070	720	692	....	458	360	....	660	....	9,333
Quincy	1867	1,705	2,425	1,310	570	54	320	696	1,088	....	464	305	$180	120	....	9,237
Quincy	1868	2,010	2,765	890	570	54	261	637	1,140	75	485	305	330	80	....	9,602
Decatur	1869	2,023	3,110	920	695	64	340	812	1,045	75	475	305	330	60	....	10,254
Decatur	1870	2,320	3,345	1,025	1,400	185	515	867	1,104	95	515	305	....	110	....	11,786
DuQuoin	1871	2,820	3,355	785	1,400	255	395	717	993	80	519	305	....	310	....	11,934
Ottawa	1872	3,100	3,535	775	1,400	255	585	725	997	105	531	295	144	280	....	12,739
Peoria	1873	2,970	2,550	775	1,450	257	1,285	717	1,745	145	440	295	88	310	....	3,027
Peoria	1874	3,655	3,845	1,065	1,740	502	185	770	1,790	181	413	300	88	200	....	11,734
Ottawa	1875	3,375	5,430	1,020	1,740	647	185	1,088	1,949	181	421	440	88	475	....	11,039
Ottawa	1876	3,255	3,704	920	1,450	647	195	697	1,252	181	565	340	25	1,580	....	14,811
Freeport	1877	3,595	3,410	660	1,485	663	150	674	1,125	161	588	340	18	1,445	....	14,814
Freeport	1878	3,525	3,940	775	1,420	784	150	684	1,239	96	480	400	... .	1,105	$300	14,898
Springfield	1879	3,495	4,001	1,290	1,485	812	180	711	1,289	96	557	235	Speed.	1,500	305	15,856
Springfield	1880	3,570	4,001	1,290	1,475	817	180	726	1,374	91	565	235	$2,340	500	322	17,486
Peoria	1881	4,220	3,746	1,290	1,475	812	170	759	1,286	91	587	335	1,100	....	330	16,201
Peoria	1882	4,340	3,776	1,320	1,550	812	105	802	1,276	176	575	335	1,100	....	416	16,583
Chicago	1883	4,915	4,756	1,320	1,835	812	....	802	1,404	383	592	335	6,000	....	534	23,688
Chicago	1884	4,395	4,866	1,880	1,835	857	....	1,198	1,530	478	753	476	5,700	....	583	24,551

PURE-BRED STOCK.

The following table shows the number of entries, amount of premiums offered, and the amount of premiums paid to Pure-Bred Stock exhibited at the Fairs held in the State during the past four years.

Pure Bred Stock.	1880.			1881.			1882.			1883.			1884.		
	No. of entries.	Amount premiums offered.	Amount premiums paid....	No. of entries.	Amount premiums offered.	Amount premiums paid....	No. of entries.	Amount premiums offered.	Amount premiums paid....	No. of entries.	Amount premiums offered.	Amount premiums paid....	No. of entries.	Amount premiums offered.	Amount premiums paid....
CATTLE—															
Short-Horn	1,862	$10,189	$8,146	1,253	$9,071	$6,546	1,527	$10,432	$7,404	1,634	$9,552	$7,427	1,381	$8,532	$6,085
Hereford	102	1,783	671	147	2,395	678	146	3,314	680	194	3,922	1,160	279	4,479	1,192
Holstein	82	1,718	435	75	1,881	608	125	2,457	638	127	2,699	630	312	3,347	1,214
Polled Angus	...	...	...	...	...	...	...	...	...	31	1,373	125	128	3,801	745
Devon	35	935	136	115	1,697	435	116	2,226	561	110	1,870	618	51	2,105	297
Ayrshire	48	776	165	77	1,417	322	48	1,688	196	31	1,300	68	57	1,608	233
Jersey	340	2,900	1,364	401	3,446	1,700	505	4,383	1,897	684	5,006	2,814	622	5,440	2,657
HORSES—															
Thoroughbred	293	3,097	1,403	305	3,428	1,571	355	3,850	1,761	294	2,941	1,454	519	4,362	1,878
Roadster	1,638	7,166	6,116	1,638	10,071	8,068	2,149	9,694	8,716	2,751	10,997	7,923	2,863	9,057	7,006
Norman and French Draft	537	2,531	1,457	543	2,796	1,588	598	3,605	2,105	1,099	4,468	3,227	753	3,633	2,147
Clydesdale and English Draft	328	2,071	1,277	363	1,681	1,112	516	3,217	1,695	683	2,936	1,917	596	3,817	1,972
SHEEP—															
Cotswold	259	696	567	384	1,020	712	357	1,151	838	308	891	633	301	983	668
Leicester and other long wool	602	1,385	1,060	595	1,416	1,055	751	1,948	1,372	580	1,487	1,093	516	1,716	1,184
Southdown	277	1,050	683	181	857	562	339	1.375	790	270	871	541	327	1,040	660
Oxford and other downs	177	420	262	250	652	483	113	464	179	191	550	278	93	519	238
American Merino	135	408	322	188	668	397	161	815	592	174	667	415	210	796	496
Spanish Merino and other fine wool	280	885	602	217	862	502	331	1,072	664	453	1,003	758	468	909	680
SWINE—															
Berkshire	776	2,615	1,836	585	2,758	1,563	936	2,996	1,754	601	2,795	1,556	883	3,138	2,140
Poland China	1,007	2,870	2,108	1,042	2,875	1,900	1,239	3,145	2,376	1,702	3,177	2,579	1,997	3,598	2,932
Chester White	279	1,718	709	261	1,600	766	266	1,825	869	234	1,612	716	589	1,937	975
Essex	52	456	103	51	688	229	68	710	305	44	418	155	37	511	113
Suffolk	41	267	137	25	411	123	30	389	79	35	210	57	100	445	263
Small Yorkshire	23	109	43	...	76	...	14	152	24	2	94	1			
Duroc Jersey Red	...	...	...	...	...	...	...	...	...	...	...	...	369	1,886	999

RECEIPTS AND EXPENSES.

The yearly receipts and expenditures, in connection with the management of the Illinois State Fair since its organization, in 1853, are given in the following table.

The economy on the part of the officers of the Fair for the past thirty-one years, as shown in the exhibit, is conclusive evidence of the ability and high character of the managers, who have cheerfully rendered the industrial classes of the State a most valuable service without other consideration than the satisfaction of having done well whatever they could to advance the general prosperity of the people of the State.

ILLINOIS STATE FAIR.

Place of Fair.	Year	Receipts including balance.	Expenses.	Premiums	Expenses and premiums	Balance in treasury.	Deficit.
Springfield	1853	$4,751 20	$2,954 04	$941 45	$3,898 49	$852 71	....
Springfield	1854	6,344 85	1,754 76	3,146 79	4,901 55	1,443 30	....
Chicago	1855	14,128 83	9,019 11	2,472 00	11,491 11	2,637 69	....
Alton	1856	11,675 64	5,704 73	2,650 00	8,354 73	2,320 91	....
Peoria	1857	19,198 82	6,542 85	8,104 54	14,647 39	4,551 43	....
Centralia	1858	14,436 78	6,926 49	6,306 20	13,232 69	1,203 49	....
Freeport	1859	16,814 69	7,318 31	6,967 46	14,285 77	2,528 92	....
Jacksonville	1860	17,348 97	9,137 99	8,881 86	18,019 85	....	$670 88
Chicago	1861	14,824 56	9,969 99	4,286 50	14,256 49	568 07	....
Peoria	1862	4,836 07	4,870 30	**715 60	5,685 80	....	849 73
Decatur	1863	15,251 70	8,356 59	4,862 00	13,218 59	2,033 11	....
Decatur	1864	23,434 82	9,974 16	8,145 88	18,119 74	5,314 08	....
Chicago	1865	28,739 06	15,627 84	8,204 00	23,831 84	4,907 22	....
Chicago	1866	21,820 41	11,247 39	7,209 55	18,456 94	3,363 47	....
Quincy	1867	32,974 82	13,298 51	10,608 14	23,906 65	8,068 17	....
Quincy	1868	24,096 92	12,542 42	7,649 50	20,191 92	3,905 00	....
Decatur	1869	27,407 70	11,356 95	9,227 79	20,584 74	6,822 96	....
Decatur	1870	30,007 71	10,978 25	10,558 28	21,536 53	8,471 18	....
DuQuoin	1871	25,186 43	10,261 28	10,060 46	20,321 74	4,764 69	....
Ottawa	1872	29,758 84	9,880 43	10,750 44	20,630 87	9,127 97	....
Peoria	1873	41,919 87	11,619 21	10,679 92	22,299 13	19,620 74	....
Peoria	1874	44,810 59	14,040 61	12,541 00	26,581 61	*18,228 98	....
Ottawa	1875	26,800 18	12,300 36	13,612 47	25,912 83	887 35	....
Ottawa	1876	†24,913 55	13,099 10	5,977 42	19,076 52	5,839 03	....
Freeport	1877	33,514 70	7,921 49	‡16,923 93	24,845 42	8,669 28	....
Freeport	1878	26,544 73	§8,803 71	12,841 34	21,645 05	4,899 68	....
Springfield	1879	31,656 91	‖13,678 56	15,003 96	28,682 52	2,974 39	....
Springfield	1880	25,237 76	10,071 82	15,432 76	25,504 58	....	266 82
Peoria	1881	25,660 89	10,563 94	15,563 32	26,127 26	....	466 37
Peoria	1882	33,805 70	12,018 43	15,068 38	27,086 81	6,718 89	....
Chicago	1883	62,537 78	16,535 83	22,258 25	38,793 08	23,743 70	....
Chicago	1884	60,721 95	16,607 78	20,307 62	36,915 40	23,806 55	....

* $10,000 invested in U. S. bonds, $11,250.
† Includes proceeds $10,000 U. S. bonds, $11,250.
‡ Includes 50 per cent. premiums unpaid in 1876, $5,518.
§ Includes $451.81 account Fat-Stock Show.
‖ Includes $1,861.24 on account of Fat-Stock Show.
**No Fair. Premiums on field trial.

Respectfully submitted.

S. D. FISHER, *Secretary.*

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FOURTEENTH REPORT

OF THE

STATE ENTOMOLOGIST

ON THE

NOXIOUS AND BENEFICIAL INSECTS

OF THE

STATE OF ILLINOIS.

Third Annual Report of S. A. Forbes,
For the year 1884.

SPRINGFIELD, ILL.:
H. W. Rokker, State Printer and Binder.
1885.

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LETTER OF TRANSMITTAL.

ILLINOIS INDUSTRIAL UNIVERSITY,
OFFICE OF STATE ENTOMOLOGIST.
CHAMPAIGN, ILL., December 31, 1884.

To his Excellency, JOHN M. HAMILTON, *Governor of the State of Illinois:*

SIR: I have the honor to transmit herewith my third report as State Entomologist of Illinois, covering the operations of the office for the year 1884.

Besides the articles presented in the report proper, I have prepared an elaborate paper on certain contagious diseases of insects, and on numerous studies and experiments made at the office for the cultivation of the virus of such diseases and their propagation by artificial measures. This study has not yet reached the stage of actual successful application in the field on a large scale, and I have therefore decided to withhold the results, for the present, from publication here, and to publish them instead as a contribution to science in the Bulletins of the State Laboratory of Natural History. The space thus saved I have decided to use for an index to the first twelve reports of the State Entomologists of Illinois; and this is presented herewith as an appendix to my present report.

Respectfully submitted,

S. A. FORBES, *State Entomologist.*

INTRODUCTION.

ENTOMOLOGICAL CALENDAR.*

To the year 1884 we can not accord any peculiar distinction in the annals of economic entomology in Illinois, unless we consider the general prevalence of the SOFT MAPLE BARK LOUSE (*Pulvinaria innumerabilis*) and a notable outbreak of the GRASS WORM (*Laphygma frugiperda*) as especially remarkable events. The general damage to the crops by insects, was, as a whole, decidedly below the average, not a single one of the great scourges of agriculture having attracted general attention or done conspicuous damage except in one or two instances and in limited localities. I wish I might believe that this fact was due in any considerable measure to the progress of the popular knowledge of economic entomology and to an increased disposition to apply its resources to the war against our insect enemies, but I judge that it is to be attributed to providential rather than to human interposition.

The average weather of this season and the preceding, inclining in both to extraordinary moisture, except during the period when the Hessian fly is peculiarly subject to injury by drouth, has supplied conditions on the whole unfavorable to a high rate of multiplication among those species peculiarly susceptible to meteorological influences.

The HESSIAN FLY, so destructive last year throughout Southern Illinois, was so far decimated by its parasites and by the long drouth and heat of summer, that we have not encountered it in destructive numbers except in Clark county, in Eastern Illinois, in localities where it did not last year prevail. The fact that the fly occurred here when the weather was not different from that of more southerly localities infected last year, shows that we owe the arrest of its ravages in these localities less to the weather than to other causes,—chief of which are, of course, its parasites.

---

*Under the above head it is proposed to give, each year, a summary of the principal events of interest in the field of economic entomology within the State, with principal reference to the great insect pests whose numbers vary widely from year to year, so that these introductions may afford a continuous history of the oscillations of the most important species. Here also will be introduced those species first recognized as injurious to agriculture during the year which the report covers, where these seem of sufficient importance to deserve special mention in this connection.

The CHINCH BUG was not heard of from farmers anywhere in the State, nor found unusually abundant by us in our field observations. As a contribution to the life history of the species in "off years," the following memoranda for 1883 and 1884, are worthy of record. During the former year we first noted the chinch bug on the 14th of March, in Central Illinois. The adults were still in their winter quarters, occurring about roots in matted grass under old boards and rubbish. April 10, in Southern Illinois, they were still found in the rubbish of strawberry fields, and occasionally among dead leaves in the woods. On the 20th of that month, a very few were encountered in wheat fields near Carbondale. On the 26th, at Normal, they were still collected by the hundred, under boards, not having yet emerged from their winter quarters in Central Illinois. Indeed, on the 7th of the following month, we found them there in the same situation, and in rubbish about wild strawberry plants. On the 20th May, at Centralia, I saw a few adults in wheat fields, and on the 24th, at Decatur, they were relatively abundant in wheat at the bases of the plants, many of them coupled.

Specimens placed alive in an empty vial soon deposited their eggs, but careful search about the roots of the plants failed to discover any, and it is probable that oviposition was but just beginning. On the 6th June, adults were found quite numerous just beneath the surface of the ground, about young corn in the field. Many of these were pairing and laying their eggs about the roots. On the 19th June, young chinch bugs emerged from eggs deposited the 23d of the preceding month. On the 23d June, we found the adults, still pairing, in corn fields, and young individuals very numerous between the sheath of the lower leaf and the stalk. On the 26th, at Warsaw, the adults were still to be seen among the roots of wheat, together with many young in the first stage. A few chinch bug eggs were also found in the same situation; and adults still occurred at this season among the roots of corn. On the 29th, at Godfrey, Illinois, a few miles above St. Louis, young chinch bugs were noted frequently in wheat fields, mostly in the first stage, (that immediately following the egg), but a few in the second. Adults were also still occasionally to be found. On the 2d July, the young were noted as still occurring beneath the sheaths of corn, none having yet emerged to the outer surface. All the stages were now found in wheat fields, although pupæ were relatively rare. On the 25th July, in Northern Illinois, young were found beneath the sheaths of the leaves of corn, mostly in the second stage. From this time to October 1, a hiatus occurs in our observations for 1883, but at the latter date all sizes still occurred upon the corn, concealed beneath the bases of the leaves, ranging in age from adults to those newly hatched. On the 11th November, both imagos and pupæ were found hibernating under the bark of an old log at Normal.

In 1884, considerable numbers were found March 24, under boards at Normal, scattered under leaves and rubbish in woods, and in similar situations. They were apparently less numerous than even the year before. April 14, adults were seen under boards and rubbish in Southern Illinois. May 9 and 10, they were occasionally obtained by sweeping grass, having evidently now emerged from their winter quarters. On the 16th, adults were noticed at the bases of the plants in rye fields, (doubtless engaged in laying their eggs), and also at the bases of the stalks of sprouting corn. On the 19th, at Danville, they were likewise seen at the bases of stalks of wheat, and were taken by sweeping the meadows. In the former situation they were several times observed *in coitu*. On the 22d, considerable numbers, all adult, were obtained from rye. No young could be detected, although the adults were frequently paired. The latter were also occasionally numerous in corn fields. On the 24th, they were taken frequently by sweeping oats, and likewise found coupled about the roots of corn. On the 5th July, the young were noted frequently at bases of stalks of rye in fields at Normal, and on the 20th, were seen occasionally on corn beneath the sheaths. August 4 to 11, adults and pupæ were frequently taken on corn, and on the 21st, both adults and young of several stages, some, evidently of the first, occurred at Effingham in fields of corn between the leaves and stalk. September 25th, at Godfrey, adults were found seemingly preparing to hibernate under rubbish in the strawberry fields. Imagos, with occasional pupæ, were likewise found between the husks of ears of corn.

From the above we may infer the usual existence of two broods and at least the occasional occurrence of a third, even in those seasons when the results of their multiplication are relatively insignificant, and the insects themselves escape general notice. Their life history in time of peace hence does not differ materially from that during seasons of immense and wide-extended ravage.

The ARMY WORM was not heard from anywhere as a notably injurious species, although occasional individuals were noticed in the corn, as usual, in the course of our field operations. A fresh female moth was noticed May 3, having evidently just emerged from the chrysalis. On the 27th May, mature larvæ were found feeding upon leaves of wheat in the field. Transferred to a breeding cage, these entered the earth June 7, one emerging June 28, and the other July 7.

The CORN ROOT WORM (*Diabrotica longicornis*), has continued its injuries to the staple crop of the State, interrupted only by the growing disposition to practice rotation of crops as a remedy against it. All the information acquired during the last year is in the line of that previously published, no case of considerable injury having been observed by us or reported to me upon ground not recently in corn for two or more years.

Our collections and observations also confirm the previous account of its life history as published in my first report. The earliest date of the appearance of the larvæ in the earth, which we have ourselves noticed, is June 14, (1883). I found the larvæ about half grown in fields of corn near Polo, in Ogle county.

During the summer just past, less injury was done to corn than in some previous seasons, owing to the wetness of the weather in early summer, in consequence of which the affected corn rooted more firmly and was able to maintain itself notwithstanding the attacks of the insects. Indeed, during July, I found many roots of corn burrowed lengthwise by nearly full-grown larvæ, but nevertheless not killed by this violence.

The adult was first seen by us this year, July 21, at which time pupæ and full-grown larvæ, together with others not matured, were abundant in the earth. Eggs were again found in the earth about standing corn stalks in October of this year, dead adults occurring at the same time under leaves and in the ground.

The damage inflicted by this insect has in some cases within my observation amounted during the last year to a nearly total loss of the crop, one farmer reporting a rapid falling off in the yield from sixty bushels to six per acre, owing evidently to the ravages of this insect only.

In extreme Northern Illinois, I detected, in July, the notorious WHEAT MIDGE, (probably the most destructive of wheat insects), in fields of spring wheat then just ready for harvest. Considerable damage had been done to here and there a field in that vicinity. The importance of a general knowledge of the characters and habits of this most destructive pest is so great, that I have prepared a brief synopsis of the essential facts relating to it for this Report.

In autumn, in fields of fall wheat, occurred a sudden irruption of a caterpillar which had not attracted attention in Illinois for more than a dozen years. This species, almost universally mistaken by farmers for the army worm, was the GRASS WORM, (*Laphygma frugiperda*), sometimes called also the fall army worm. It ate to the ground large tracts of winter wheat, and where these areas were not resown, the ground still remains bare. The larvæ went into the earth in October, and most of them are passing the winter in the pupa stage.

The WHEAT STRAW WORM (*Isosoma tritici*) still remains a growing evil where winter wheat is raised, and an additional species of very similar habit, called the GREATER WHEAT STRAW WORM (*Isosoma grandè*), was discovered by us this year in Central and Eastern Illinois.

The WHEAT BULB WORM, an outbreak of which occurred two years ago in Fulton county, has not been found seriously injurious since, except in a field of rye this fall, in central McLean county. This grain was sown in July as pasture for stock,—a fact which confirms my former supposition with respect to the injurious effect of early sowing, where injury by this insect is to be anticipated.

A new enemy to corn (the ROOT WEB WORM) which I first detected last year, was not bred to the imago until the present season. In abundance where occurring, and magnitude of its injuries, it promises to become one of the most important pests of the corn grower. An article upon this insect is published upon another page.

The IMPORTED CABBAGE WORM (*Pieris rapæ*), although still notably injurious, has been clearly less so this year than for several years preceding, owing unmistakably to the general prevalence and extreme destructiveness of the cabbage-worm disease mentioned in the introduction to my report for last year. In several cabbage fields in Central Illinois, I saw, in August and September, the work of this larva arrested and the insect itself almost exterminated by an outbreak of this disease.

An epidemic extremely similar to the above, possibly identical with it, and not impossibly derived directly from it, has prevailed extensively during the season among the SILK WORMS of Illinois, having, for instance, almost completely destroyed a lot of these worms at the Industrial University which were being reared for experimental purposes. I have this season successfully cultivated the virus of this disease and applied it to the destruction of other insects.

The FOREST TENT CATERPILLAR, an outbreak of which species occurred last year in Southern Illinois, was again seen in the same region this season, but in number so greatly reduced as to inflict little if any definite injury. The condition and fate of examples collected by us in Southern Illinois this year and kept in breeding cages until they perished, confirmed my supposition of a destructive contagious disease among them, apparently the principal cause of their disappearance last year. This was one of the diseases known as *muscardine*, similar to that of the silk worm occasioned by the well-known fungus *Botrytis bassiana.*

Probably the most notable entomological event of the year was the extraordinary abundance of the MAPLE BARK LOUSE (*Pulvinaria innumcrabilis*), which species occurred in destructive numbers throughout the State, at least from Chicago to Shelbyville, and probably also farther south. Notes upon the life history, and details of experiments upon this species with insecticides, will be found upon another page.

The CHERRY SLUG (*Selandria cerasi*) continued abundant this year, extending its ravages farther to the south than the year before. It was extremely abundant in Central Illinois, at least as far south as Bloomington, many trees being nearly defoliated by it.

The APPLE LEAF SKELETONIZER (*Pempelia hammondi*) and the LESSER APPLE LEAF ROLLER (*Teras malivorana*) were each more abundant, locally, in Central Illinois, than the year before, and continued their injuries in nurseries until a later date, in some cases almost wholly preventing advance in growth of young nursery stock.

The GRAPE POMACE FLY, the larvæ of which abound everywhere in rotten apples and in old pomace at the cider mills, was this year reported as extremely injurious to grapes in Western Illinois. Another grape pest, well known in Europe, but not hitherto reported in America, (the GRAPE PHYTOPTUS), was discovered by us this season in Illinois, infesting certain of the native varieties. The GRAPE PHYLLOXERA, concerning whose status in Illinois I have received this season several inquiries from foreign consuls, has maintained about its usual average during the present year, doing occasional damage to those varieties especially susceptible to it, but producing little or no effect upon the total yield of the vineyards of the State.

THE TARNISHED PLANT BUG, whose work in strawberry fields attracted especial attention last year, and led to the publication of an elaborate article in my last Report, has continued about as before. Its injuries in strawberry fields were, however, decidedly less conspicuous, owing to the more favorable character of the season. The STRAWBERRY ROOT WORMS and the CROWN BORER were seemingly neither more nor less abundant than usual.

I.

Contributions to Agricultural Entomology.

ARTICLE I. ON NEW AND LITTLE KNOWN CORN INSECTS.

In arranging for this report, our notes of the season on insects injurious to corn, I have assumed that in the present state of our knowledge, nothing could be reckoned really insignificant which either now affected or threatened to affect in future, a crop so important as this to the prosperity of the State. The balance of insect life in any cultivated region, is so unstable in character, subject to changes dependent upon differences of season and agricultural practice, and upon a variety of other causes not well understood, that it is possible that the most trivial species affecting a crop, may rapidly rise to be one of the most destructive, especially if it be its normal habit to produce several successive broods in a season. In such an event the importance of accurate knowledge of the uprising species will be readily appreciated, and our acquaintance with the life history of all should be such that we may be able readily and correctly to divide them into the groups of dangerous and indifferent species. Our observations of the year, have consequently not been confined exclusively to the major insects injurious to corn, but have covered the minor species also, with a view to thus laying the foundations for a complete knowledge of the subject of insect injuries to this crop in Illinois; and the following paper is to be regarded as preliminary to an elaborate and extensive treatment of the subject in a future report.

1. THE ROOT WEB WORM.

(*Crambus zeëllus*, Fernald.)

Order LEPIDOPTERA. Family CRAMBIDÆ.

(Plate I. Figs. 1-3.)

The discovery of an insect new both to science and to agricultural entomology, and capable of serious injury to the most important crop of the State of Illinois, is, fortunately, at this date an unusual event, so thoroughly, of late years, has the ground been scanned; and yet, long as is the list of insect enemies of Indian corn, we have no reason to suppose that it is yet complete.

The balance of animal life is continually shifting, even in old and long-settled countries, species formerly rare or unknown coming to the front, and others formerly abundant and perhaps destructive, retiring temporarily from view. Not only do insects of other regions invade our own territory, but a peculiar collocation of circumstances often favors the undue multiplication of some one or more of our native species, with the result to convert an insect harmless from its rarity, into a very serious obstacle to the success of agriculture; and it is to be noted that having once reached this dangerous prominence, it is a rare thing for an insect to permanently lose its hold on the agricultural products of the country.

In respect to the species treated in this article, we may at least congratulate ourselves that it has been detected early in its career, before it has reached really dangcrous numbers, and prompt and thorough study of its economy and of its life history may give us the means of controlling it before it can do serious mischief.

On the 7th June, 1883, my assistant, Mr. Webster, who had been detailed to study the work of the black-headed grass maggot in corn fields*, brought to the office some supposed cutworms—bristly reddish larvæ, which he had found gnawing the roots of corn below the surface, in fields in McLean county, on both old and new ground.

They were not seen again during this season, but on the 19th May of the present year I received the same species from Mr. E. A. Gastman, superintendent of public schools at Decatur, with the information that they had been sent him from Harristown by a farmer, who reported that they were doing serious damage to the roots of his young corn. On the 22d of that month they were again sent me, by Mr. R. H. Mills, of Dwight, in Livingston county, with the following note:

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* See 13th Report of the State Entomologist of Illinois, pp. 57-59.

"My corn is being badly damaged by small worms. I send you specimens of them, all of which were found in one hill. There are usually not more than three or four in a hill. The corn is large enough so that we are cultivating it. I shall be very glad if you can give me some information in regard to the worms. They are making bad work with the corn in our fields."

On the 23d, Mr. D. C. Tomlinson, of Osco, Henry county, sent me other specimens of the same species, from a field of corn on clover and timothy sod, which had been plowed up early in April. His whole field had been so completely destroyed by this larva, in conjunction with two species of cutworms, as to necessitate replanting. He found the new larvæ (now three-eighths to seven-eighths of an inch long,) partly or wholly encased in a web within the ground.

On the 27th May, I visited Dwight for the purpose of searching the fields of Mr. Mills from which the web worms had been sent me. The corn in this field was injured most in patches. Over one area of about one-fourth of an acre, many hills were missing, and fully one-third of those remaining were damaged, with a plant occasionally killed. Upon digging into the affected hills, the caterpillars were found just beneath the surface, sometimes as many as five or six in a hill, each in a retreat formed by loosely webbing together a mass of dirt irregularly cylindrical in shape, one and one-half to two inches long, and about one-half an inch in diameter. The worm was found in a silk-lined tube within this mass (the tube not always perfectly constructed), which in some cases opened at the surface, its presence being indicated by a circular opening about the size of wheat straw, in the earth next a stalk of corn.

The first attack upon the plant was made by gnawing the outer surface beneath the ground and above the roots. Occasionally the stalk was completely severed, as by a cutworm, but usually not, the larvæ showing rather a disposition to work upwards, eating a superficial furrow or burrowing lengthwise along the center of the stem. In other parts of the field, only here and there a stalk was attacked. The foliage was also frequently eaten, the lower leaf first and then the upper ones, the larva evidently leaving its burrow for this purpose. The tips of the leaves were eaten off, or irregular elongate holes were eaten through them,—probably at night, as I have never seen the larva abroad by day. Where the corn was largest, webbed masses of dirt were frequently found which contained no larvæ, a fact which I was at first inclined to suppose indicated that the insect inhabiting them had transformed, especially as the larvæ found were of quite uniform size and apparently full grown. I failed to find a single pupa, however; and as our breeding experiments did not yield the insect for more than a month, it seems more likely that these empty webs had been abandoned by worms which had gone in search of younger stalks.

On the 7th June, after several hours of careful search in cornfields near Lexington, McLean county, where I selected by preference the least thrifty fields, I found no living larvæ, and but a single mass of webbed dirt at the base of a stalk precisely similar to those formed by the web worm, the hill containing it having been evidently damaged some time before.

A number of the larvæ were brought to the office and placed in earth in a breeding cage on the 28th May. On the 14th June those in the breeding cage were transferred to fresh corn. Many of them were dead, but nine active specimens remained. On the 30th the corn was renewed and another search was made. No larvæ were found and but two living pupæ. A single imperfect moth was released from the earth in which it had completed its transformations, but it was not able to expand its wings and could not be determined. One of the other pupæ was unfortunately crushed by accident, and the other was badly infested by mites which clung closely to its crust about the head with inserted beaks. These were carefully picked away, and this sole remaining pupa was returned to thoroughly calcined earth to complete its transformations. On the 22d July it emerged as a small gray moth, evidently belonging to the family Pyralidæ.

From Prof. C. H. Fernald, to whom I referred the specimen, I learned that it was a species of Crambus new to him and probably undescribed. On the 3d July Mr. Mills, of Dwight, wrote me that the larvæ had almost entirely disappeared from the corn fields, and that the season had been so favorable to the crop that no perceptible damage had finally resulted, with the exception of the loss of a few hills here and there.

DESCRIPTION.

Larva.—The presence of this larva in the earth may be suspected when an irregular mass of webbed dirt is found among the roots of the corn, an inch or less beneath the surface. If this mass be picked open, the larvæ will usually be found safely ensconced within.

The individual web worm is characterized by its pale reddish brown color, nearly black head, dusky yellow neck or cervical shield, and by the extraordinarily large "piliferous tubercles," each bearing an unusually long black hair. These "tubercles" are not elevated, but consist of smooth shining areas, of a firmer consistency and a darker tint than the adjacent surface.

The head is dark chocolate brown, slightly and irregularly rugose, and bears scattered long hairs of a yellowish color. Upon the front is an S-shaped white mark which does not coincide with the sutures of this region, the branches of the S lying some distance outside the corresponding sutures, and the common stem being relatively short. The cervical shield is yellowish, with a white median line, a whitish anterior edge, and an oval black spot on the sides near the middle of the lateral margin. Surface with a few scattered long dark hairs. Below the lateral edges of the cervical shield, are two large piliferous tubercles with the anterior spiracle situated in an emargination at the upper posterior angle. The second and third segments of the thorax each bear two rows of piliferous tubercles,—the anterior of four large quadrate spaces; the posterior of two, sometimes united on the middle line.

From the fourth to the tenth segment, the piliferous tubercles above the spiracles are in two transverse rows of four each, those of the anterior row being quadrate with rounded angles, and at least as large as the interspaces between them, and those of the posterior row transversely elongated, about twice as long as wide. The lateral tubercle of the anterior row immediately above the spiracle is emarginate at its posterior inferior angle, on all the segments from the sixth to the ninth. On these segments is a smaller tubercle, immediately behind and beneath the spiracle, and two additional ones occur between the spiracle and the proleg. Directly before and without each proleg, is a narrow arcuate tubercle, bearing several long hairs. The hairs upon the dorsal tubercles are at least as long as the corresponding segments of the body.

The anal shield is smooth, of the same dark reddish brown color as the piliferous tubercles, and bears a few long brown hairs. The spiracles are all dark brown, the anterior the larger, and the two posterior next in size. The ventral surface is a little paler than the dorsal, the prolegs have a yellowish tinge, the thoracic legs are dusky.

Length of a full-grown specimen .6 to .8 of an inch, its greatest width .1 inch.

Pupa.—The pupa is smooth, shining, pale brown, the abdomen a little darker, without hairs or spines. Eyes reddish brown, bilobed above; abdomen with an obtuse horny tip.

Length .4 inch, breadth .1 inch.

Imago.—Prof. Fernald, whom I requested to prepare a description of the moth, kindly furnished me the following, in advance of its proposed publication in the *Canadian Entomologist:* *

CRAMBUS ZEELLUS, n. s. Fernald.

"Expanse of wings, from 18 to 24 mm.

Palpi, head and thorax, pale leaden gray. The labial palpi extend forward as far as the length of the head and thorax. The maxillary palpi are as long as the head.

Fore wings, dull leaden gray, mixed with ashy and whitish, especially on the outer part, and crossed beyond the middle by two angulated dull ochre yellowish lines, overlaid more or less with dark brown. The first line crosses the end of the cell where it is angulated. The second crosses the wing about half way between this last and the end. The terminal line is dark brown, and a dark brownish cloud extends obliquely in from the apex to the second line, but does not reach the costa. A narrow ochre-yellow line, somewhat curved, extends from the middle of the base of the wing to the second line near the anal angle, and a similar line, though less plainly marked, runs parallel, between this line and the hinder margin. The terminal space is more or less gray. Outer margin regularly excavated below the apex. Fringes pale metallic lead color. Hind wings, pale fuscous with lighter fringes. Under side of the body and all the wings, pale fuscous.

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*Since published in Vol. XVII, 55, March, 1885.

Habitat:—Maine, Pennsylvania, West Virginia, Illinois, Missouri."

DISTRIBUTION.

From the observations here recorded, it is rendered probable that this species is distributed generally throughout Central Illinois at least, having been actually received by us from Henry, Macon, McLean, and Livingston counties.

LIFE HISTORY.

The small size of the individuals observed earliest in the season perhaps makes it possible that they came from the egg last spring; and the brood represented in our collections must have completed its development by the end of July. Whether a second brood appears is altogether uncertain.

The injuries inflicted occur so early as to permit replanting in most seasons in case they should prove to be of serious import; and this species is consequently to be classed with the cutworms so far as the effect of its injuries to corn are concerned.

NATURAL ENEMIES.

With the exception of the mites which attack the living pupæ in our breeding cages, and which were probably responsible at least in part for the death of most of the larvæ which we tried to rear, the only natural enemy of this species observed by us was a common predaceous ground beetle, *Pterostichus sayi,* of which there were numerous examples in an infested field near Dwight. The crop of one of these contained a black fluid and no solid structures, (an indication that the beetle had recently drained some insect of its juices), and the other was full of fragments of a dark, thin-skinned caterpillar with but few hairs. This was probably a web worm, as these beetles had been noticed, by the owner of the field, abundant in badly injured hills infested by those insects.

ARTIFICIAL REMEDIES.

Respecting artificial remedies, I can at present make only a few suggestions. When corn is replanted on account of the ravages of this web worm, the second planting is liable to be attacked and destroyed in turn, since the larval life of the brood lasts too long to permit a postponement of the replanting until the injuries of the insect are arrested by pupation. As the larvæ are all collected in the old corn hills, it is clearly inexpedient that this corn be plowed up until the cultivation of the field positively requires that this should be done. As long as it is left for the larvæ to feed on, they are little likely to desert it for the new planting, and they may even remain feeding on it until their active larval life is practically completed and their season's mischief finished.

Indeed it is much to be desired that some rapid and easy mode of applying some cheap insecticide to these larvæ in the ground may be invented, since where their injury is sufficient to compel replanting, every worm in the field could be destroyed by the application of a little kerosene or Paris green to the old hills of corn.* Where the injury is not total it is easy to capture the worms by hand without injury to the corn. As they lie secured by day in the ground just beneath the surface immediately beside the corn, they may be turned out of the earth by a motion of the finger,—the webbed nest always serving to show their position. I do not doubt that the labor of boys could very profitably be utilized in this way, even in large fields of corn.

2. The Sulphur Leaf Roller.

(*Dichelia sulphureana*, Clemens.)

Order Lepidoptera. Family Tortricidæ.

[Plate I. Fig. 4.]

The injuries to agriculture due to this species have been hitherto insignificant in Illinois, as far as my observation extends, but as they have attracted sufficient attention in other parts of the country to warrant treatment in the reports of the United States Entomologist, and as I have found that they affect, to some extent, by far the most important crop in Illinois, brief notice of them is evidently desirable.

LITERATURE.

This species was first described by Clemens in 1860, in the Proceedings of the Philadelphia Academy of Sciences for that year, page 353, as *Crœsia? sulfureana*. In 1864 it was again described by the same author in the Proceedings of the Entomological Society of Philadelphia, under these additional names: *Crœsia? fulvoroseana*, *Crœsia? virginiana*, and *Crœsia? gallivorana*, the form described under the latter name having been received from Illinois.

A more general description, including all under one specific name, together with notes on distribution, is given by Robinson in the Transactions of the American Entomological Society for 1869, (Vol. II, p. 273).

In the Report of Prof. Comstock for 1881, as United States Entomologist, was published the only elaborate article upon this species which has yet appeared, he treating it especially as a clover insect, describing the larva and pupa, giving an account of its life history as indicated by his observations and breeding experiments, and summarizing the facts known respecting its distribution.

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* Both the above considerations apply also to the wire worms in corn, since these are likewise gathered wholly in the corn hills in infested fields.

By Prof. Packard, in 1882, in the second volume of Papilio, page 182, the larva was re-described, the occurrence of the insect in Maine was noted, and observations were added upon its food plants and the date of its transformations.

In the same year, Prof. Fernald mentions the species in his list of North American Tortricidæ, and gives its synonomy, distribution, and choice of food plants.

In 1883, Mr. Coquillet, of Illinois, described the larva again, and gave some additional notes upon its food plants and life history.

DESCRIPTION.

Imago.—This insect may be described in general terms as a brownish yellow moth, the fore wings of which are marked by two V-shaped brown bands (the apex of the angle backwards) so placed that when the wings are closed these markings form an X.

The palpi are long, nearly or quite twice the length of the head, yellow above, deep red laterally and beneath. The antennæ are reddish brown; the head and thorax are yellow above, tinged with red or purple at the sides; the patagia red in front, yellow beyond. Anterior wings golden yellow, finely reticulated with red or purplish, (sometimes the reticulations are wanting), costa tinged with purple at base. A purple spot on the middle of internal margin throws out two diverging lines, one of which attains the costa at the basal third, the other ending just below a similarly colored subapical costal spot. The internal margins more or less tinged with purple, somewhat constant and deepest towards the base; fringes yellow. Posterior wings above and beneath varying from pale yellowish fuscous to dark fuscous or blackish. Under surface of anterior wings clouded centrally with fuscous; the margins paler, sometimes yellow. Abdomen brownish, legs pale silvery brown, anterior ones darkest. Expanse, female, 14–17 mm.; female, 17–19 mm.

Larva.—Cylindrical, slightly fusiform, 14–15 m.m. long. Head and cervical shield varying from pale honey-yellow to yellowish brown, the rest of the body yellowish green, translucent, showing the darker green of the alimentary canal. Eyes, third joint of antennæ and tarsi blackish. Piliferous tubercles (slightly paler than the rest of the body) on each segment, arranged in a trapezoid, each bearing a brownish hair half as long as the body is thick. Spiracles green, ringed with brown. At the end of the supra-anal is a flattened spinose tubercle.

Pupa.—The pupa is thus described by Prof. Comstock in the Report of the Department of Agriculture for 1880:

"Length, 8 m.m. Color, dark shining brown, lighter at the end of the wing covers and the parts covering the palpi and base of the antennæ. Front rounded and smooth. Abdominal segments on the dorsal side armed with two transverse rows of small spines inclined backward, those on the posterior edge of each segment finer and closer than those of the other row. Abdomen terminated by a protuberance, flattened above, rounded at the end, hollowed out underneath the base, and armed with two fine hooks on each side, and four from the end."

This species has a wide range, occurring throughout the country from Maine and Massachusetts to Illinois and Missouri, and Florida and Texas.

LIFE HISTORY.

Prof. Comstock believes this leaf-roller to be at least three-brooded, the larvæ of the first brood occurring in May, of the second, in June, and of the third, in August.

Larvæ collected by him May 13 pupated in part on the 19th and emerged as moths from the 19th of May to the 3d of June. Those collected June 20 pupated July 1 and emerged July 5-14; and those taken August 15 pupated September 1 and emerged September 1-16. Later larvæ were found October 21.

In Maine, larvæ collected by Packard the first week in August pupated August 7 and transformed to the imago August 16 and 17.

In Illinois there seem also to be several broods, as indicated by the following facts from our breeding-cage records, but it is not possible to fix their number or to assign them limitations of time.

Larvæ collected May 17, this year, began to pupate on the 20th and to emerge June 7. Those obtained May 23 pupated June 11-21 and commenced to emerge June 19. Others taken June 7 emerged June 26-28. Those pupating July 6 emerged July 11, (Coquillet), and those taken August 18 pupated on the 20th and completed their transformations on the 31st of the same month.

Hence, without actually breeding from the egg, we can only say that the insect breeds all summer and that it apparently hibernates in the larval stage, as indicated by the late date of Prof. Comstock's larvæ, mentioned above.

INJURIES TO VEGETATION.

This species has been repeatedly bred by us from corn, during the present year, the larvæ being found in May and June folding the young leaves of the plant from side to side and feeding within the cylindrical case thus formed.

By Prof. Comstock it was reported injurious to clover, both white and red, near Washington, folding the leaflets into a kind of tube by drawing the edges together with silken threads spun for the purpose. "Sometimes," he says, "they spin two leaflets loosely together, or to the flower head when they are nearly full grown. They issue from either end of this tube, and feed upon the surrounding foliage, of which, when the larvæ are young, they eat only the under surface, leaving the veins and the epidermis of the upper side intact, but when nearly full grown they eat irregular holes through the surrounding leaflets and flower heads.

These larvæ are very active when disturbed, and wriggle from their tubes, suspending themselves by a single thread, by which they can let themselves down to to the ground, and if further disturbed, they wriggle about with great energy."

In addition to the plants above mentioned, this leaf-roller has been found by Packard upon the pine, and by others upon the locust, grape, strawberry, cotton, and orange. Mr. Coquillett bred it from *Verbena hastata*, Dr. Kellicott from *Ranunculus acris*, Mr. Walsh from grass and willow. We have bred it this summer from the following list of plants besides corn: common burdock (*Lappa major*), red clover, *Verbena urticifolia Monarda fistulosa*, and *Erigeron canadense*. Although its injuries have not been reported serious, its wide distribution, its abundant food resources, and the number of successive broods, bring it within the list of species capable of serious mischief under favoring circumstances.

NATURAL ENEMIES.

Prof. Comstock says, "One of the larvæ on clover was found to be infested with a hymenopterous parasite, which, however, failed to emerge."

In our own breeding cages three hymenopterous parasites emerged this summer, all true Ichneumonidæ.

3. The Red-Banded Leaf Roller.

(*Lophoderus triferanus*, Walk.)

Order Lepidoptera. Family Tortricidæ.

This species occurs somewhat rarely in Illinois, and has not been reported throughout its wide range to do any injury except to the cranberry in Massachusetts, where its larva is locally known as one of the cranberry worms. We bred it, however, during this past season, from pale green leaf rollers in young corn, and consequently may regard it as worthy of brief mention, especially as its local abundance in cranberry plantations in Massachusetts would indicate a capacity for excessive multiplication which makes it a possible source of danger in the great corn fields of the Mississippi Valley.

The presence of this larva and of that of the sulphur leaf roller just treated, is indicated in corn fields by the folding lengthwise or rolling of the leaves in May and June. If these leaves be opened, a green wriggling larva will be found enclosed in a web within.

The moth hatching from these folded leaves in June, if *Lophoderus triferanus*, may be recognized as an insignificant brown species, about a half inch across the spread wings. The fore wings are reddish brown except on the terminal fourth which is gray speckled with black, as is also the basal half of the posterior edge of the same wings.

A more detailed description is given beyond.

The species was first described by Walker in 1863, as *Cacœcia triferana*, and again by Clemens in 1865, in the proceedings of the Entomological Society of Philadelphia, under the name of *Tortrix incertana*. A better description of the moth, with figures of male and female, is given by Robinson in Volume II, of the Transactions of the American Entomological Society, under the same specific name.

As an injurious insect it is mentioned by Dr. Packard in the Massachusetts Agricultural Report for 1870, and in the Tenth Report of the Geological and Geographical Survey of Colorado and Adjacent Territory, 1876. By Miss Murtfeldt it is reported as injurious to the rose, in the third volume of the American Entomologist (1880), and by Prof. Lintner as a clover insect in the Annual Report of the New York Agricultural Society for the same year.

In all the foregoing articles except the first, this species is treated under Clemens' specific name, but in Fernald's Catalogue of the Tortricidæ of North America, (1882), this is reduced to a synonym of Walker's *triferanus*. The larva was not distinguished in our breeding cages from that of the preceding species (*Dichelia sulphureana*), consequently I am unable to give a detailed description of it. Clemens' description of the imago is as follows:

Palpi ochreous or brownish ochreous except the minute third joint which is blackish. Head and thorax ochreous or brownish ochreous.

Anterior wings pure pale reddish brown within the central fascia, except on internal margin, which is broadly covered at base with blackish brown scales forming a rather prominent irregular spot followed by an aggregation of intermediate pale ochreous and blackish scales to the fascia. Central fascia broad, distinctly dark brown, sometimes reddish brown. The sub-apical costal spot is dark brown and separated from the central fascia by a reddish brown shade. The remaining outer portion of the wing pale ochreous except a testaceous brown spot above the anal angle. Fringes dark ochreous.

Posterior wings fuscous above, testaceous beneath. Fringes pale testaceous, much clouded centrally with dark fuscous.

Expanse, male 15, female 19 mm."

This species has been collected from Maine and New York to Illinois and Texas, and has been found feeding on the cranberry, elm, soft maple, oak, apple, rose, beans, *Gnaphalium polycephalum*, clover, strawberry, and corn.

Our specimens, collected on May 29, emerged June 30.

4. The Common Lady Bug.

(*Hippodamia maculata*, DeG.)

Order Coleoptera. Family Coccinellidæ.

There are a thousand things in the experience of every naturalist to show that the adjustments of Nature are rarely exact.

Even the best of our zoölogical friends occasionally turn against us. The most insectivorous of birds fails to discriminate in its captures between the enemies and the friends of man, and the renowned "lady bugs," kindly looked upon by the whole civilized world as friends of no uncertain color, have also occasional lapses from virtue, when pressed by hunger or actuated by whim.

The common spotted lady bug is often abundant in corn fields, where, as dissection usually demonstrates, it is in search of the falling pollen of the plant, or of minute fungi which speck the withered leaves, or of the plant lice which infest the foliage, tassels, and husks; but last August, we saw it eating the exposed kernels at the tip of the ear, hollowing out their substance, and partly buried in the cavities thus made.

But it is perhaps fortunate that the lady bugs have the power of sustaining themselves for a time on other than their favorite food, for no one who knows the efficiency of this species as a check on the multiplication of the corn plant louse can fail to yield it gladly the few kernels of corn needed to tide it over a period of dangerous scarcity of its animal food.

5. The Brassy Flea Beetle.

(*Chætocnema pulicaria*, Cr.)

Order Coleoptera. Family Chrysomelidæ.

This abundant little flea beetle, one of the commonest and most widely distributed, was twice noticed in young corn during the last season in numbers sufficient to inflict noticeable injury at the time, by riddling the leaves with small holes.

6. Leaf Hoppers.

Tettigonidæ.

Jassus inimicus, Say.

Cicadula nigrifrons, n. s.*

Cicadula quadrilineatus, n. s.*

Macropsis nobilis.

Among the various species of leaf hoppers found upon young corn, those above mentioned have occasionally occurred in our experience in sufficient numbers to injure the plant appreciably in June and July. The three species first mentioned are more fully treated under the head of Insects Injurious to Wheat.

7. Grasshoppers (Acrididæ) in Corn.

The damage done to Indian corn by the common species of grasshoppers has been often enough reported, and is known to every one, but the species responsible for it have rarely been precisely identified. During the present season the following species have been found noticeably injurious to this crop in Illinois:

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*See page 63.

THE RED-LEGGED GRASSHOPPERS, *Pezotettix femur-rubrum*, DeG., and *P. atlanis*, Riley. The most evident injury to corn done by these species which came to my knowledge, was that reported by Dr. F. W. Goding. In a letter dated August 29, he says: "For the first time in my life I have this summer seen damage done to crops by locusts. The corn bordering on grass lands has been considerably injured, causing the ear to be small and undeveloped. They ate the leaves, husks, tops and ends of the ears. The injury was done by the *femur-rubrum* and *atlanis;* also many narrow winged 'katydids' were with them." [Probably *Orchelimum vulgare.*]

Acridium americanum, Drury.—In Union and Perry Counties, in September this great bird grasshopper (so closely related to the Egyptian locust as to startle one as he notices its abundance in extreme Southern Illinois), was occasionally found doing considerable damage in the borders of cornfields, sometimes completely stripping the stalks of leaves. It never swarms, however, and has not the dreaded power of migration of its relative, and has hitherto done no serious injury.

Caloptenus differentialis, Thos.—This species, one of our most abundant, was the commonest grasshopper in cornfields in Southern Illinois this fall, feeding not only on the leaves, but on the corn at the tip of the ears, and sometimes gnawing down the side of the cob.

Orchelimum vulgare, Harris.—In some situations this common grass locust was about as abundant as *Caloptenus differentialis*, and similarly injurious.

8. A CONTRIBUTION TO THE LIFE HISTORY OF THE CORN PLANT LOUSE.

(*Aphis maidis*, Fitch.)

Order HEMIPTERA. Family APHIDIDÆ.

By H. Garman.

Our knowledge of this insect is made up of scattered contributions which have been made from time to time since the year 1856, when Dr. Asa Fitch, in his second report on the noxious, beneficial and other insects of the State of New York, named the insect and described the aërial form. At the time his report was written, Dr. Fitch had seen only the larva, wingless female, pupa and winged female of the aërial form, and these were supposed by him to occur only upon the peduncles of corn ears.

Mr. B. D. Walsh next discovered the root form and described its larva, apterous female, pupa and alate female (Proc. Ent. Soc. Phil., 1863, and Trans. Ill. State Ag. Soc., 1865). He mentions the fact that this form is attended by small ants.

In his list of the plant-lice of the United States, published in Bulletin 2 of the Illinois State Laboratory of Natural History, 1877, Dr. Cyrus Thomas adds to our information the statement that the aërial form occurs on the corn silks as well as on the ear-stalks.

In the years following this until 1882, the notes on the corn louse which appeared in periodicals added nothing new to its history, being chiefly repetitions of the matter given in the three articles above referred to. But in the Stark County (Illinois) News in 1882, Dr. E. R. Boardman published an account of the insect in which we find a few facts additional to those already given. The aërial form is said by this writer to appear on the tassels in the latter part of July and to be also attended by small ants. The lice are said to occur "all the way up the stalk," are badly parasitized by a small ichneumon fly and are preyed upon by the lady bug, *Coccinella 9-notata.*

Prof. S. A. Forbes in his report for the year 1882, as Illinois State Entomologist, adds the three lady bugs, *Hippodàmia maculata, H. convergens,* and *H. glacialis* to the list of corn plant louse enemies, and the ant which attends the lice is identified by him as *Lasius flavus.*

The next addition appeared in the third biennial report of the Kansas State Board of Agriculture, 1883. In this report Mr. E. A. Popenoe states that he observed in his state, corn plant lice living upon sorghum cane and found the larvæ of a syrphus fly preying upon them.

The latest of the more important contributions appeared in Prof. Forbes' report as State Entomologist for 1883. In this article, broom corn is added to the list of corn louse food-plants and exact data as to the occurrence of the two forms during the season are given. Panicum, a common grass of corn fields, is shown to be a possible food-plant.

These authors have given us the essential facts as far as they are at present known. Besides their work only a few scattered notes and more or less imperfect summaries of the information they give, have appeared in print. As thus recorded the history is imperfect in several important particulars. (1) It does not tell us where the males and egg-laying females appear and when and where the eggs are laid, and (2) it does not tell us positively what relation the root and aërial forms bear to each other. It was with the purpose of deciding these points that the observations recorded in what follows were undertaken.

A marked irregularity in the growth of corn often noticed in the spring of the year, is frequently found on investigation to be the result of attacks of the root form of the corn louse, and large colonies will in such cases be found on the bases of the stems and on the roots of the dwarfed plants. Such plants frequently do not recover from the damage done them, but yield at the harvest, if anything, small or imperfect ears. The aërial lice also sometimes dwarf the plants where they occur in great numbers, but when the fore part of the season is favorable, the plants gain such a start by the time this form appears that subsequent injuries will not check the growth.

The damage wrought by these insects occasionally reduces a crop one-half or three-fourths, but damage so severe as this is exceptional and confined to limited areas. The uniform presence of the lice, however, and their wide distribution, taken with the value of the crop they affect, makes them very damaging pests to the people of this

State. Taking the acreage for corn in Illinois as 6,586,201, the the number given in the report of our State Agricultural Department for 1882, an average loss in a year of as little as one bushel to each ten acres would amount to about 658,620 bushels of corn, representing at least $100,000 in money, an amount sufficient to pay the expenses of a State Entomologist for fifty years.

NOMENCLATURE.

All those who have written upon the corn louse, with the exception of Prof. Forbes, have used without question the technical name *Aphis maidis*. There can be little doubt, however, that the corn plant louse belongs to the genus Rhopalosiphum, as this genus is used by the great authorities on the classification of aphides. The characteristic swollen cornicles are not as well marked as in some members of the genus Rhopalosiphum, but will serve at a glance to distinguish this species from members of the genus Aphis. The old name has so frequently appeared in these reports that a change is not deemed desirable here.

DESCRIPTION.

Winged viviparous female [root form].—Head black. Thorax brownish black. Abdomen above pale green with about three marginal black spots and numerous small, dark specks over the surface. Antennæ dark with pale at the articulations. Prothorax pale in the middle; meso- and metathorax chiefly brown. Cornicles black with some black at their bases, chiefly inside. Cauda dusky, with several transverse dusky marks before it. Thorax chiefly dark below, with interspaces about bases of limbs brownish. Under side of the abdomen pale green; two transverse dark marks before the cauda. Legs mostly black; tibiæ for basal two-thirds pale. Length of body 1.8 mm.; width of body, .9 mm.; antennæ, .7 mm; cornicles, .12 mm.; wing, 2 mm.

Pupa of winged viviparous female [root form].—Head obscurely dusky. Thorax obscure reddish brown. Abdomen above pale dull green, without spots. Antennœ dusky only at tip. Eyes reddish-brown. Wing-pads obscurely dusky. Cornicles black. Cauda dusky. General color below greenish. Rostrum dark at base and tip. Tarsi and tips of tibiæ dusky. Length of body, 1.51 mm.; width of body, .8 mm.

Wingless viviparous female [root form].—Head black above. Prothoracic segment black; the following three body segments each with a transverse dusky mark on their middles. Abdomen pale green, with black marginal spots and with numerous smaller specks over the surface. Antennæ dusky at tip and slightly also at base. Eyes reddish brown. Cornicles black. Cauda dusky; preceded by two transverse black marks. Abdomen beneath with two transverse black marks before the cauda, otherwise nearly uniform pale green below, Rostrum black at base and tip. Coxæ, femora chiefly, tips of tibiæ and the tarsi black. Body widely oval in outline. Antennæ short, about half the length of the body and head; first and second articles equal in length, first largest; third article longest; fourth and fifth subsequal and about equal to the thickened proximal part of the sixth. Cornicles short, tapering towards the tip, not swollen, extremities flared. Cauda short and wide. Length of body, 1.4 mm.; width of body, .93 mm.: antennæ, .57 mm.

The young of this form are paler in color and have proportionally longer rostra and shorter cornicles.

Winged viviparous female [aërial form].—Head black. Thorax chiefly black above. Abdomen pale green, faintly bluish at sides, with three marginal black spots on each side preceding larger spots which surround the bases of the cornicles. Antennæ chiefly black. Cornicles black. Cauda green, edged with black. Segments behind the cauda dark-edged. Head and thorax beneath chiefly black. Abdomen pale green, with two transverse black marks preceding the cauda. Legs pale at their articulations; middle part of tibiæ often pale. Rostrum chiefly black. Body more slender than that of the female of the root form. Antennæ rather long; fourth and fifth articles each longer than the basal part of the sixth. Cornicles moderately long, swollen in the middle. Length of body, 2 mm.; width of body, .87 mm.; antennæ, about .85 mm.: cornicles, .2 mm.; wing, 2.65 mm.

Pupa of winged viviporous female [aërial form].—Head dark brown, often presenting an appearance of two longitudinal dark bands. Body chiefly pale green. Wing-pads, cornicles and tip of cauda black. Antennæ chiefly dark. Beak dark at base and tip. Legs nearly all dark; tibiæ pale proximally. Length of body. 1.6 mm.; width of body, .62 mm.; antennæ, .7 mm.; cornicles, .12 mm.

Wingless viviparous female [aërial form].—General color pale green, with cauda, cornicles and greater part of the rostrum, antennæ, and legs black. Head with two broad, approximated, longitudinal dark bands which give the prevailing color. Abdomen with the usual marginal black spots and the black patch about the base of the cornicles. Antennæ dark at base and apex. Eyes reddish brown. Anterior legs mostly pale. Rostrum dark at base and apex. More slender than the female of the root form and of a brighter green color. The cornicles are swollen in the middle. Length of body, 1.97 mm.; width of body, 1 mm.; antennæ, .75 mm.; cornicles, .17 mm.

The young of this form differs from the adults in the same manner as do those of the root form, *i. e.* they are more slender, have longer beaks and shorter cornicles.

Towards fall the green color worn by the adults is changed for darker colors and often females which are still giving birth to young are bluish black. A meal-like coating can be detected on the bodies by examination with a lens.

LIFE HISTORY AND HABITS.

Naturalists hold to the belief that it is not in accordance with natural law that a species of animal should reproduce indefinitely without the union of the male and female sexes. It is true that when supplied with heat and food artificially, certain species of Aphides have been induced to reproduce for long periods without marriage, but it is held that this could not be continued for any great length of time without injury to the species, and eventually, it is thought, would result in its extermination. There are certain species of plant lice, however, of which no males or oviparous females have been seen. Such species are thought to produce males and egg laying females locally or only at seasons which from some unknown cause are especially favorable to this method of reproduction.

Observations made by the writer during the past season indicate this habit for *Aphis maidis*. From the latter part of May when this plant louse appeared on the corn till the middle of November when the corn had long been dry and the ground had been many times frozen, the corn louse was followed with special care; and though hundreds of individuals were dissected under the microscope, only wingless and winged viviparous females were seen during the season. About October 6th, most of the sorghum cane in Central Illinois was ripe and ready for the mill. *Aphis maidis* had been during the season abundant on the blades and to save itself must now depart. Upon examination the species was found to be represented mostly by pupæ and alate females. The pupæ, as was found by confining them, were rapidly maturing and the winged adults were leaving the sorghum and scattering in all directions. While standing at the edges of such fields at this time one's person interrupted the flight of many of these winged lice. The roots were now carefully searched for the root form, but it was not to be found in places where at the beginning of the season it was common. Whole plants were searched with the glass for eggs, and, though some of them had afforded nourishment to hundred of aphides during the summer, no eggs could be found. The lice which were thus forced to leave the sorghum field doubtless resorted to the corn, which was less advanced and for some time afterward continued to furnish them appropriate food.

With the advance of the season the lice upon corn were also deprived of food. But in this case the irregular development of the stalks which prevailed in most fields served to collect the lice into great colonies by driving them gradually from their stalks to the greener and less matured ones. At the last most of the lice were to be found between the outer husks of the greener ears and upon dwarfed and immature stalks. These had not all collected there as winged females, for the wingless louse showed itself capable of leaving a stalk and finding a better one. Both wingless and winged females of of the aërial form were now isolated and confined: both were found to give birth to living young. On the ninth of November numerous specimens were collected in the fields and carried to the house. Among them were many winged females, some pupæ and a few young. All proved to be viviparous. Some of them were alive November fifteenth; on the twentieth of this month the last winged female died with its body distended with matured embryos (11 were counted.) The last to succumb was a pupa which died some days later.

The specimens seen in the fields November 9th, were the last ones observed alive out of doors. Previous to this date there had been severe frosts, and the corn was nearly all dry and hard. The lice obtained at this time were found chiefly among the husks of nubbins and in crannies between the ensheathing part of the leaves. They were evidently restless, and the warmth of the sun at midday aroused some of them to endeavors to find better quarters. These were found wandering about the stalks. An almost microscopic examination of stalks which had supported thousands of aphides was made after the lice disappeared without finding an egg. The root form of the corn louse has not to my certain knowledge been observed later than October 8. Its period has probably passed and its purpose been served when the warm weather of July comes on, and with it the aërial form. But to make sure as to whether or not this form was hibernating in the ground, the roots of weeds, grasses and corn in cornfields were searched in November, but without finding them. In the same fields at this time, the hibernating viviparous females of *Schizoneura panicola* were abundant on the roots of blue grass and timothy.

From these observations, it seems to me evidently either that (*a*) *Aphis maidis* matures its egg-laying brood locally; (*b*) that this brood matures on some plant other than corn, or (*c*) that the brood appears at intervals greater than one year, the species being in the meantime maintained by hibernating viviparous individuals.

(*a*) The area over which the foregoing observations were made will doubtless be quite uniformly infested early the coming spring with corn plant lice. That these lice can have been so distributed over so extensive an area, and at so early a date after hatching from the eggs of locally developed oviparous females, can not be believed.

(*b*) If eggs were produced on some plant other than corn, it must have been by plant lice born of the viviparous females which deserted the corn. The development of such a brood would have been possible even after the first of November; for *Aphis mali* matured its oviparous brood on the apple trees after this date. When the winged viviparous females of the corn louse began to mature rapidly and scatter through the fields in the fall, close watch was kept of available plants to see whether or not the lice resorted to them for this purpose. Volunteer corn, which grew up along railroads late in the season, became almost invariably stocked by these migrating individuals, but on no other plant could the adults and young be found. Wheat, oats and the perennial grasses seemed to be the most likely to be resorted to, and the roots and stalks were thoroughly examined. The lice peculiar to these plants were often found in very great numbers, but in not a single instance was anything found established on them which could be taken for *Aphis maidis*.

(*c*) The hypothesis that the lice hibernated as alate viviparous females was the only one, then, left to me, and though not thoroughly satisfied with the nature of the evidence, I am disposed to believe that this is the usual manner of passing the cold months, and that the oviparous brood appears only under specially favorable circumstances, perhaps locally. This conclusion is held subject to revision. It is what seems *most probable* with the results of two seasons observation before me.

The following observation bears upon the relation of the root and aërial forms to each other. On the 25th of June a number of the root form were colonized on the roots of corn growing in the laboratory, and on the 5th of July one of these lice was observed to have established itself upon one of the leaves. On the 6th of July it was found to have given birth to two young during the preceding night. Others of the root lice were observed upon the leaves, but the plant at this stage began to die, and the experiment ended. I have little doubt, however, that this would have proved the beginning of a colony of aërial corn lice.

In the light of these observations, the history of the lice during the year seems to be this: Reproduction is carried on during the warm months by the viviparous (mostly wingless) females of the aërial form. In the fall viviparous winged females predominate, serving to distribute the species and (generally) by hibernating pass it over the winter months. In the spring these females resort to the roots and bases of the stems, where they are then protected from the cold, and multiply here until the warm weather of the latter half of July sets in, when their descendants migrate to the leaves, husks and silks, founding there the colonies of aërial lice.

An account of the life history of this plant louse would be imperfect without some notice of the little ant, *Lasius flavus*. In the spring this ant is almost invariably to be found with the root lice, carefully guarding the latter, and when the burrows are exposed carrying them away and concealing them in the earth. During the fore part of summer it occurs on the plants among the aërial lice, but when the dry season of late August and early September sets in, it burrows deep into the earth and is not often seen except after rains, when it opens up its burrows. With the fall rains it again comes to the surface and may be found to the end of the season with its young and colonies of *Schizoneura panicola* on the roots of grasses. Its purpose in attending the corn louse is doubtless to secure the sweet fluid which a tap from an antenna will cause a full fed louse to eject.[*] But I am disposed to believe that the ants attend *Schizoneura panicola* for the purpose of browsing upon the waxen coat which covers that species. I have several times seen the ants gathered about a detached mass of this wax and apparently eating it. In some nests of these ants one finds in winter masses of plant lice eggs which have been collected the previous fall. The ants carry these about as the do the plant lice. Why they are collected, I am unable to say. A natural inference is that they collect them to stock plants in the vicinity of their nests in the spring.[†] It may be they are used as food, as, indeed, from the results of some experiments in keeping them indoors I suspect the lice are occasionally.

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[*] During the past summer I have repeatedly seen the ants secure this favor, and to my surprise the sweet droplet was always discharged from the vent, never from the cornicles.

[†] A quantity of these eggs were collected last spring and given to a colony of ants kept in doors. They hatched small green plant lice which at once scattered in all directions. They would not make their home on any of the plants offered them, and so were lost.

The following table shows the dates at which the lice have been observed. It is deficient in not showing the relative abundance at the different dates of the stages, larva, pupa, and adult females:

Date.	Root Form.				Aerial Form.			
	Larva....	Pupa.....	Winged female..	Wingless female..	Larva....	Pupa.....	Winged female..	Wingless female..
May 16	×	×		×				
" 22				×				
June 1				×				
" 6	×	×	×	×				
" 7			×					
" 13			×					
" 25	×		×	×				
" 29				×				
July 3				×				
" 6	×							
" 21	×							
" 25	×			×	×	×	×	×
" 28					×			
" 29			×	×				
" 31					×	×		
Aug. 2					×	×	×	×
" 11					×	×	×	×
" 20					×	×		×
" 28					×	×	×	
Sept. 4					×		×	×
" 5					×	×	×	×
" 6				×				
" 8								×
" 18							×	×
" 19					×			
" 22								×
" 25						×		×
Oct. 2					×	×	×	
" 6					×	×	×	×
" 7					×	×	×	×
" 8	×			×				
" 9					×		×	×
" 17					×		×	
" 25					×	×	×	×
" 30					×	×	×	×
Nov. 1					×		×	×
" 8					×		×	×
" 9					×	×	×	
" 15						×	×	

The species will probably be found to occur in every county of the State. We have observed it or had it reported from the following: Stephenson, Ogle, DeKalb, Rock Island, Kendall, LaSalle, Putnam, Stark, Livingston, Warren, Peoria, McLean, Tazewell, Mason, Menard, Champaign, Morgan, Jersey, Fayette, Effingham, Marion, White, Madison, Union, and Pulaski.

PARASITES AND PREDACEOUS INSECTS AFFECTING THE CORN LOUSE.

A most efficient check on the further increase of the corn louse exists in a small four-winged fly, belonging to the genus Adialytus, which deposits its eggs within the bodies of the lice and in its larva state feeds upon their tissues. The greater part of a colony of the lice is sometimes thus infested, the lice containing the grubs which hatch from the eggs being known by their brown swollen bodies, or at an earlier stage by a slightly yellowish color. The adult Adialytus is a slender, active ichneumon fly, about .06 inch in length. Its feelers and legs are long and slender and the abdomen is very flexible so that it can easily be bent upon itself. The general color is black, with yellow mouth-parts and legs. The wings are transparent and beautifully iridescent under the magnifying glass. The male closely resembles the female, but has two more articles in each of its antennæ and has the tip of its abdomen blunt instead of sharp pointed. The following more detailed description will serve to distinguish the species from those which infest other plant lice.

Adialytus maidaphidis, nov. sp. Head and thorax black, shining, smooth. Abdomen reddish brown, darkest on the middle of the segments, with a few short whitish hairs. Front with whitish hairs. Antennæ dull black. Mouth-parts pale honey yellow. Coxæ of anterior and middle legs, trochanters of all the legs, anterior and middle femora, anterior tibiæ and tips of middle and hind tibiæ honey-yellow. Posterior femora mostly black. Limbs clothed with appressed silky white pubescence, thickest on the tibiæ and tarsi. Hind coxæ black. Tarsi dusky. Wings transparent, iridescent, with some yellow at base and a basal half of costa. Stigma smoky brown, with a touch of yellow at its inner angle. Nerves black. Head subspherical. Eyes large and prominent. Three ocelli conspicuous. Antennæ of 13 articles in the female; with 15 in the male. Two proximal articles equal in length, shorter than the others, about as long as wide. The succeeding articles about equal in length, about twice as long as wide. Distal article in female longer than the others; in the male it is about equal to them. The articles are longitudinally, finely carinate. Thorax obovate, elevated anteriorly, impunctured. Abdomen spindle shaped, depressed, pointed in the female, blunt in the male. Legs long and slender; femora spindle-shaped, about three-fourths the length of the tibiæ. Tibiæ slender at base, gradually enlarging to their extremities. First article of tarsi long and uniform in diameter; about as long as the three succeeding together. Second article a little larger than the following ones and slightly swollen. Three distal articles subequal. Length, 2 mm.

During the summer and autumn these little flies may be seen running rapidly about on the corn which is infested with lice, and if watched will be seen now and then to approach a plant louse, tap it gently with the antennæ, and if the louse seems to be satisfactory, the abdomen of the parasite is suddenly bent downwards and then forwards between the legs, the victim is stabbed by the short, sharp pointed ovipositor and an egg is inserted at the same time in its body. The parasitized louse continues to feed after the egg has been deposited as if nothing had occurred to discommode it, and if young may continue to grow until the natural size is reached. All this time the great grub hatched from the egg is feeding upon its tissues and growing rapidly so that by the time it gets its growth the body of its host is swollen out greatly beyond the usual proportions. The grub seems to avoid the vital organs of its host until the last so that the louse does not entirely succumb until the grub is ready to become a pupa, at which time it seems to devour all the remaining tissues or crowd them aside to make room for itself. The body of the louse has by this time become brown and dry, and though outwardly looking like a very plump plant louse is really only a skin enclosing a parasite. By some means, not ascertained, the swollen body becomes *glued* to the leaves and there remains until the parasite emerges. The grub of the Adialytus is yellowish white, thick-bodied and short. It lies bent upon itself and when removed is perfectly helpless. The pupæ lies in the same position, is also white, with the large eyes showing conspicuously at the sides of the head. The adult emerges within the dried skin of the louse it has inhabited and at once gnaws a round piece out of the back of the latter, generally near the posterior end of the body, and pushing this piece out emerges through the opening made. Often these pieces which are gnawed out adhere at one side, so that after the parasite has emerged they fall back in place and the empty skin looks much as before. The parasites emerge in great numbers in the fall of the year at the time the winged females become most abundant, and I believe many of them hibernate as adults. An examination of a great number of swollen plant lice in midwinter, however, reveals a few with living grubs. Lice that are infested with this parasite seem never to produce young, their whole existence being given up to bringing the unwelcome guests to maturity. The wingless females seem to suffer most from its attacks, by far the greater number of swollen bodies representing this form, but a good many pupæ and winged females also become infested. The greater immunity of the winged louse is probably due to its greater activity; when disturbed, in warm weather, it takes wing readily.

Syrphus Fly Larvæ.—Next to the small hymenopterous insect just described, the larvæ of small dipterous insects known everywhere as syrphus flies are most destructive of the lice. These larvæ are considerably larger than their prey, and spend their time creeping about among the herds of lice on the corn ears and tassels. They seize the plant lice in their mouths, and in a few minutes have sucked out all their juices. Great numbers of lice are destroyed by a single larva in the course of a day, as they are very active and voracious. They occur throughout the summer months, and are sometimes found as late as November. Their empty pupa skins are sometimes found with a round hole in the posterior part, from which some parasite, has emerged.

The Syrphus fly larva is elongate cylindrical, transversely wrinkled with a blunt posterior end, tapering more nearly to a point anteriorly. The head is not much different from the other body segments. On each side of the mouth is a black, hard, toothed jaw, which serves to hold the lice. There are no eyes. The color is pale green when the alimentary canal is filled with the juices of plant lice; at other times it is yellowish brown. Its length is about three-tenths of an inch.

The adult is a handsome two-winged fly, with large reddish brown eyes, transparent iridescent wings, shining, greenish black thorax, and with the abdomen alternately striped transversely with black and yellow. The head is chiefly yellow, with a frontal tuft of short, dark pubescence, and a wide black band extending down the front to near the base of the antennæ, with silvery pubescence behind the eyes. The three basal articles of the antennæ are orange yellow; the bristle is black. A wide yellow stripe extends from the anterior margin of the thorax on each side to the bases of the wings, where they terminate abruptly. Legs pale yellow. Interior surface of abdomen also pale yellow.

Larvæ of this fly kept in confinement, pupated during the first part of August, and the flies emerged between the fifteenth and twenty-fifth of September. During this period the larvæ were observed among the lice in the fields, a fact which indicates several broods during the summer. The only flies obtained were accidentally destroyed, and their species can not therefore be definitely determined. The larvæ creep like leeches, and when they have seized a plant louse, raise the anterior part of their bodies so as to prevent the struggles of the prey freeing it from their grasp. A European species is said to devour as many as one hundred plant lice in an hour. I have watched our species on several occasions, and even when hungry they did not finish one louse in less than five minutes, and three or four lice at one time seemed to satisfy them. Generally but one or two larvæ occur in a colony of lice.

THE SMALLER TWO-SPOTTED LADY BUG (*Hyperaspis signata*, Oliv.)—This lady bug has a reputation as a destroyer of the destructive bark louse of the maple trees. It occasionally occurs also among the herds of corn plant lice in the corn fields.

THE PLAIN LADY BUG (*Cycloneda sanguinea*, Linn.)—The adult of this lady bug is also found among colonies of lice. It is less common as a rule than the following species, but in some fields in the south part of the State which we visited, it was the more abundant of the two.

THE SPOTTED LADY BUG (*Megilla maculata*, DeG.)—This lady bug is common in all its stages upon corn and destroys great numbers of lice. In the autumn and winter great numbers of the adults, sometimes thousands in a heap, may be found under boards at the edges of the corn fields.

Two other lady bugs, *Hippodamia glacialis* and *Coccinella 9-notata* have been observed in the fields but neither occur in sufficient numbers to be of any great service.

THE LACE-WINGED FLY (*Chrysopa* sp.)—The larvæ of one or more species of these flies are frequently seen devouring the aphides, and occasionally are locally abundant in the fields.

ARTIFICIAL REMEDIES.

Of artificial remedies but little can be said. The corn fields are so large that an application of any of the insecticides which can be used successfully for smaller crops would be impracticable. The parasites and predaceous insects may be depended upon to prevent any general increase in the numbers, and where local outbreaks occur, more than one season's serious damage can probably be avoided by burning off old fields in the fall as soon as the corn is husked, and to some extent also by planting on ground which has not been in corn. For garden corn the use of a solution of kerosene emulsion thrown upon the corn from a garden engine carried on a cart would be sufficient to destroy the lice.

ARTICLE II.—NOTES ON INSECTS INJURIOUS TO WHEAT.

1. The Larger Wheat Straw Worm.

(*Isosoma grande*, Riley.)

Order Hymenoptera. Family Chalcididæ.

In May of this year, Mr. Garman collected from wheat fields in Clark county, in Eastern Illinois, and sent to the Laboratory (where they were received May 21,) straws containing a larva similar to that of *Isosoma tritici*, but larger, and evidently differing from that in life history. These were imbedded in the center of the stalk, just above the lowest joint, where they caused a bulbous enlargement of the stem, the plants containing the insects being dwarfed or killed in every case noticed. The fact that the inner surface of the stem containing the larvæ had been eaten and torn was plainly perceptible.

On the 6th of June, the living, winged adults emerged from these examples, and all the remaining straws contained at this time pupæ in the pupal envelope. The straws had been kept too dry, however, and the insects had died within them. On the 24th of May, adults of this species were found not uncommon in wheat fields at West Union, and on the 27th at Mount Carmel, in Wabash county, where a few stalks of wheat which had been evidently inhabited by the worm were likewise noticed. At Carmi, in the same county, on the 30th, stalks which had been injured by them were again observed, although none contained the larvæ; but several imagos were taken within them, as also at Eldorado on the day following. At Villa Ridge, on the 3d of June, many dwarfed stalks of wheat were found in the fields from which this species had apparently emerged, but no specimens were taken here by sweeping. No further observations were made upon this species throughout the year, but I learned from Mr. F. M. Webster, an assistant to the Entomologist of the United States Department of Agriculture, that he found it afterwards in wheat fields in Indiana, near the Illinois line.

[From the last Report of the United States Entomologist (1884),* received since the above was written, I learn that Mr. Webster found this larva at Normal on the 29th of May.

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*Page 385.

Some of the specimens obtained by Mr. Webster, were described by Mr. Riley under the name of *Isosoma grandis* in the Bulletin of the Brooklyn Entomological Society for December 1884, pages 111 and 112, with the remark that they were reared from wheat stems in June.

DESCRIPTION.

The following description is in part compiled from that of Mr. Riley and in part drawn from specimens bred and collected by us.

Length of body from 4.2 to 4.3 mm.; expanse 7.6 mm.; antennæ slender, little clavate, but about half the length of the thorax, the latter smooth except the mesonotum, which is decidedly rugulose. Wings large, yellowish in color, less hyaline than those of *Isosoma tritici*, the veins reaching the outer third, the sub-marginal four times as long as the marginal. All the specimens observed were winged females. Abdomen equal to or longer than the thorax, somewhat stouter than in *Isosoma tritici*, ovate-acuminate in form. The head is tawny, with a narrow black shade down the middle, and another beneath the eye, the posterior surface black. The scape of the antennæ and first joint of flagellum yellow, the remainder black. The pronotum is large, and a brighter yellow than that of *tritici*. There are two tawny spots upon the back, and the propectus is yellow in front. There is also a large tawny spot upon the pleura, above the middle coxæ. The abdomen is shining black throughout, (except the tips of the anal appendages, which are yellow), and is very sparsely covered with pale hair averaging about one-half the length of the segments to which they are attached. The tarsi are yellow, as are also the anterior tibiæ in front and within, the other tibiæ being tawny and more or less shaded with dusky. The anterior coxæ are yellow in front, the posterior yellow externally. The femora have each a definitely limited suboval yellowish spot below, near the tip, extending two-fifths the length of the femur on the front pair, smaller on middle pair, and shorter and less definite on the posterior.

From *Isosoma tritici*, to which this species is most nearly allied, it may be distinguished by its larger size and especially by the far greater amount of tawny and yellow colors. The larva is about 6 mm. in length, of a greenish yellow color, distinguished from that of *tritici* only by its larger size.

The pupa, from 4.5 to 5 mm. long, varies in color from white in its earlier stages, to the colors of the adult when prepared to emerge. It is distinguished from that of *tritici* by its larger size and in all our specimens by the presence of wing pads folded around the posterior legs.

LIFE HISTORY AND DISTRIBUTION.

Although this species has been observed over so short a period, the facts specified are such as strongly to indicate that it is single-brooded; that the eggs are laid by the adult upon the young wheat in autumn; that the larvæ hatch and hibernate within the stem, pupating in May and emerging late in that month and early in June. They leave the stem, in fact, at about the time the young *Isosoma tritici* commences its attack upon the wheat, and consequently these two species, although specifically clearly distinguished, nevertheless alternate like two broods of the same form.

Concerning the distribution of this species, it can, at present, only be said that it occurs in Western and Southern Illinois and in parts of Indiana adjacent. As this insect inhabits the wheat only during the period of the growth of the plant, escaping before the grain is harvested, and passing the interval as a free imago, it is difficult to see how its injuries may be prevented, unless, indeed, late sowing, as practiced for the Hessian fly, may be found to affect this straw-worm also.

2. THE LESSER WHEAT-STRAW WORM.

(*Isosoma tritici,* Riley.)

Order HYMENOPTERA. Family CHALCIDIDÆ.

(Plate I, Fig. 5.)

Observations made during the present season add one or two points of interest to the life history of this destructive species. The period when it begins its injuries has heretofore been a matter of inference, but it was this summer found by Mr. Garman at work in the wheat as early as June 5, many of the larvæ being at this time only a millimetre in length, and evidently but recently hatched. The exact character of the injury produced by these young larvæ is well illustrated by the accompanying figure, exhibiting the cavity from which a very small straw worm was removed.

The parasitism of *Eupelmus allyni* upon this species and *Isosoma hordei* has been placed beyond question by recent observations of Prof. French, reported in the Cañadian Entomologist for July, 1884, pages 123 and 124. As evidence on this point, he says:

"A single joint of rye containing several galls formed by *Isosoma hordei* was put into a bottle and corked up, so that no insects could get out or in. In due course of time a specimen of *E. allynii* was found in the bottle, and the hole from which it had gnawed its way out of one of the galls was plainly to be seen. Afterward the other galls gave forth *I. hordei.* In this case there could be no question but that the specimen of *E. allynii* came from the gall made by *I. hordei.* If no *hordei* had hatched from the other galls, this would have been evident, for the galls made by this species are too characteristic to be mistaken by any one at all familiar with their work.

I have bred quite a number of this species from the inside of the stems of wheat; and in all cases they came from the cavities inside the stalk that had been gnawed by *Isosoma tritici.* Though this species of Isosoma makes no gall, its manner of eating the tissue around the inside cavity is rather characteristic, so much as to be readily recognized after a little observation. I have found a species of grass worked in by another species of an allied insect, but the manner of work is so different as to be unmistakable. *Isosoma elymi* makes a cavity on the inside of *Elymus canadensis* that is more nearly like that made by *I. tritici* in the wheat, but they differ somewhat.

In the fields I have found specimens of *E. allynii* emerged from the pupa skin, but still inside the cavity of the stem; others with the hole by which they expected to emerge gnawed so that they could almost get out, and they still there with the body protruding, and others when they had gone, the clean-cut hole indicating where they had obtained their freedom. I have bred many specimens from the straws after they had been collected, and the conditions were the same as those in the field, the inside of the stems in all cases being examined before putting them into the breeding jar.

From these facts I do not see how I could avoid the conclusion that *Eupelmus allynii* was a parasite on the two species of Isosoma."

As no description of this important parasite has yet appeared in the reports of this office, the original specific description of Prof. French, published in the Canadian Entomologist for January, 1883, is here appended, accompanied by an original figure.

Eupelmus allyni, French.

Order Hymenoptera. Family Chalcididæ.

(Plate I. Fig. 6.)

DESCRIPTION.

Female.—Average length, .10 of an inch. Color of body and antennæ uniform black, the first with a slight greenish luster. Head about .025 of an inch wide, about two thirds as long; the antennæ a little enlarged at the ends, hairy; microscopic hairs moderately scattered over the head and thorax. Thorax, as well as head, punctured; wings hyaline, dotted over with microscopic hairs, the thorax in its widest part about the width of the head. Abdomen gradually tapering from near the base, the ovipositor slightly exserted.

The color of the legs vary slightly; in five specimens the anterior and posterior legs, have the femur fuscous except at the ends; the tibiæ with basal half fuscous, the rest yellow; the middle pair of legs are yellow throughout, except the terminal tarsi. Two specimens have all the femurs fuscous, yellow at the ends. One specimen has all the femurs pale red, and the tibiæ fuscous, but this is probably a change from yellow by the poison bottle used in killing. One is marked like the first five, with the yellow replaced by pale red; another is like the first five, except that the middle tibiæ are a little clouded at base.

Male.—In this sex the body, wings and antennæ are colored like the females, but the antennæ are a little more slender at their ends. The head and thorax have about the same measurements, but the abdomen is a little shorter, the whole insect being from .06 to .07 of an inch. The legs have all the femurs yellow, front tibiæ yellow, middle and hind tibiæ fuscous, except at the apices, which are yellow; feet as in the females.

3. CONTRIBUTIONS TO A KNOWLEDGE OF THE LIFE HISTORY AND THE PARASITES OF THE HESSIAN FLY.

(*Cecidomyia destructor*, Say.)

Order DIPTERA. Family CECIDOMYIDÆ.

(Plates II and III.)

Notwithstanding the enormous losses inflicted upon agriculture in Illinois by this most destructive enemy of one of our important staple crops, the details of its life history, upon which strictly depend the value of measures for the prevention or control of the injuries, have not been fully or accurately made out for any part of the Mississippi Valley, the statements current on this subject appearing in agricultural papers and in the writings of our local entomologists, being mostly derived from the statements of Herrick, Fitch, Harris, and other observers, who have studied the species in the North Eastern States.

It is, beyond question, chiefly to its parasitic enemies that we owe such immunity from the Hessian fly as we now enjoy, these clearly constituting the principal natural check upon its continued existence in destructive abundance; but our ignorance of its parasites is even greater than that of its life history, for almost nothing definite has been learned concerning them since the observations of Herrick, of Connecticut, made in 1832; Certainly, therefore, time and labor spent in acquiring more definite knowledge of the details of the life history of the Hessian fly, and the number, kinds, seasons and habits of the parasites will be well employed, even if it should serve only to shake the confidence of our agricultural community in such remedial measures as may have been heretofore recommended.

As soon after entering upon the duties of State Entomologist as time and opportunity offered, I began observations upon this insect with the view and hope of constructing a complete account of its life history in the southern half of Illinois,—the only region lately affected by it, since winter wheat culture, although now rising to importance in the northern part of the State, has been too lately revived there to expose the fields to danger from the Hessian fly. The results here presented fall something short of a complete account of the life history of this insect throughout the year, but they nevertheless throw unexpected light upon the matter, and are deemed worthy of report as a statement of the present condition of the investigation.

Our observations were directed almost wholly to the midsummer history of the insect, the facts respecting its autumnal injuries and its hibernation being sufficiently well settled. As a fair example of the current view of the summer history, we may take the following account from Packard's "Guide to the Study of Insects":

"The flies appear just as the wheat is coming up; they lay their eggs for a period of three weeks, and then entirely disappear. The maggots hatched from these eggs take the flaxseed form in June and July, and are thus found in the harvest time, most of them remaining on the stubble. Most of the flies appear in the autumn, but others remain in the puparium until the following spring. By burning the stubble in the fall, their attacks may best be prevented."

It will be seen, however, from the observations here reported, that the above history is inaccurate for Southern Illinois, and that the remedy mentioned by the author is, as a consequence, to a great extent inapplicable.*

In following the life history of the fly through the season by means of breeding experiments and field observations and collections, the principal embarrassment has arisen from the immense prevalence of parasitism in the summer brood, so that breeding cages containing hordes of the larvæ and flaxseeds would yield scarcely a single fly, and fields in which they had destroyed the crop would send forth so few of the adult insects that the most diligent sweeping at the season of their emergence would not obtain a single specimen.

LIFE HISTORY.

1883.

Our observations for 1883 began at Centralia, April 10, at the time when the Hessian fly was abundant in the pupa state, and was also rapidly emerging in the winged form. From a large number of wheat plants containing the flaxseeds sent to Normal at this time, flies continued to emerge until the 20th of the month, after which no more appeared. These imagos laid their eggs in the breeding cages almost from the first.

On the 5th of May young larvæ of the spring brood were collected at DuQuoin, some of them scarcely more than hatched, and others full grown. These were placed in a closed fruit jar in a room adjoining the office at Normal, and kept under cover at the ordinary temperature of the out-door air; and to my surprise, on the 28th of May, *two imagos appeared* in the jar. Upon June 4, four more emerged, three males and one female, and others at intervals until June 15.

On the 17th of May, examples of both free larvæ and flaxseeds were received from Odin, in Marion county. On the 24th, we collected larvæ only, from wheat fields in Decatur, in Macon county, and on the 3d of June, flaxseeds were sent me from Macoupin county. June 12th, flaxseeds occurred in rye near Granville, Putnam county, and on the 26th they were found upon the bases of fallen stalks of wheat in fields near Warsaw, in Hancock county. On the 29th and 30th flaxseeds still unhatched, containing living larvæ, occurred in fields at Godfrey, in Madison county, and near Jerseyville; and on the 4th of July they were found in the ripened fields of wheat and in stubble at DuQuoin, in Perry county.

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* It is but fair to state that in his later papers Dr. Packard revokes the recommendation quoted above, for the burning of stubble in fall, and describes it on the contrary as a measure likely to be productive of the greatest harm; but not on the ground that the flaxseeds, which it is intended to destroy, have most of them given exit to the fly, but rather on ground which seems to me wholly untenable, viz: that the harm done by the destruction of the parasites must far overbalance the benefit done by burning the flaxseeds in the field.

Careful sweeping of the infested fields at Warsaw, Jerseyville and DuQuoin, yielded no adults. At Effingham, on the 7th, great numbers of the flaxseeds, some of which were demonstrated to contain living larvæ, were found on the stubble, and also upon the standing grain where harvesting was in progress. In badly infested fields they collected upon the platforms of the harvesters in surprising numbers. At Anna, in Union county, on the 9th, the flaxseeds were also noticed in the stubble, and at Villa Ridge, still further southward, specimens were obtained at the same date, which afterward yielded the adult insect in our breeding cages. On the 20th July I made an examination of flaxseeds collected at DuQuoin on the 4th of that month, and found the larvæ in them still living, and not yet pupated. Some of these living larvæ were dissected, and it is certain that they had not been parasitized. On the second of August, at Anna, careful and long continued sweeping of the fields failed to procure any of the imagos. On the 5th August flaxseeds were again obtained from fields in DuQuoin, and on the 7th of that month others were sent me from the same locality which contained living larvæ, although many of them were empty shells, from which parasites had already escaped.

On the 6th September I received from an assistant in the field about fifty flaxseeds collected at Centralia, which I carefully examined. All but six of these were empty shells, and only one contained a demonstrably living and active larva. Three at least of the other five were dead, while the other two were soft and possibly living, but if so, dormant.

In sweepings sent from wheat stubble near DuQuoin, which had been previously infested by the fly, the adult insect was at this time found very sparingly indeed. Our next observations in this year were made Dec. 9, at Anna, where larvæ and flaxseeds were abundant, and on the 27th of that month their occurrence at Albion, in White county, was noted by a correspondent of the office.

1884.

Commencing April 9 of the present year the occurrence of flaxseeds was reported from Marshall county by a correspondent of the office, and on the 19th of May young larvæ, some of which were but a few hours hatched, were found by Mr. John Marten, a former assistant of my predecessor, Dr. Thomas. On the 21st of this month, larvæ were collected at Marshall by an assistant, which, kept in breeding cages at the ordinary temperature of the air, *yielded adult flies* on the 20th of June. On the 25th of May both larvæ and flaxseeds were obtained at Robinson, Crawford county, and on the 27th at Mount Carmel. Flaxseeds were found at Carmi and Eldorado a few days later, and both free larvæ and flaxseeds were received from a correspondent at Robinson on the 2d of June.

On the following day flaxseeds were received from West Union in Clark county, which, placed in open fruit jars and moistened regularly, being otherwise exposed to conditions as exactly similar to those prevailing in the fields as I was able to supply in the Laboratory, *yielded adults* from the *22d* to the *28th June*, while flaxseeds obtained at the same date from Villa Ridge, in extreme Southern Illinois, *gave the imago* from the *17th* to the *20th* of that month. Flaxseeds obtained on the 4th at Anna, in Union county, yielded the adult on the 22d. Flaxseeds occurred again on the 6th and 7th at DuQuoin, and stalks received from Robinson on the 14th contained a number of them and a single partly grown, naked larva. Flaxseeds were collected at Robinson on the 17th, at Anna on the following day, at Robinson on the 20th, and at Anna on the 24th.

Specimens of flaxseeds received from Robinson on this date *yielded the adult fly* in our breeding cages four days later. In Marshall on the 25th, and at Robinson on the 27th and 30th, flaxseeds were collected. One of those from the place last mentioned was found, when opened, to contain a living larva; but others were evidently dried up, and several had already yielded parasites when collected. Those obtained from Marshall on the 25th were found in the same condition, several containing living larvæ and others being dried up or parasitized.

On the 28th *imagos were noted pairing in the breeding cages*, having just emerged from the flaxseeds obtained June 3 at West Union. At Anna, on the 1st July, a most thorough and long continued search in previously infested fields was made for the adult fly, the stubble and still standing grain being carefully swept by us and the shocks of grain being examined at great length. Situations adjacent to the wheat fields likely to yield the fly were also carefully gone over; but while numbers of other species of Cecidomyidæ were collected, not a single adult Hessian fly resulted from this search.

Flax seeds still continued to come in from Eastern Illinois,—some empty shells and others containing healthy larvæ being received on the 1st and 5th July from Marshall, on the 7th from Villa Ridge, and on the 12th from Anna.

On the 5th of this month a most extended and careful search was made again in wheat fields near Anna by Mr. C. W. Butler, with the same negative results as those of July 1, and my faithful correspondents, E. C. Madison, of Marshall, and Thomas S. Moore, of Robinson, both reported that they were unable to find the imago. Unopened flaxseeds still occurred at Anna on the 12th, and on the 14th of that month my assistant, Mr. W. H. Garman, carefully, and for several hours, searched the straws and stubble with the view of testing the possibility of the occurrence of a second brood of flaxseeds in the upper part of the straw,—the descendants of the flies emerging in May and June. None occurred in the upper joints, however, although they were still abundant at the bases of the straws.

On the 20th October of this year, the work of this fly was again evident at Robinson, larvæ occurring in three fields out of ten examined by my friend Mr. Moore.

As confirming the evidence from our breeding cages of the early hatching of a considerable percentage of the flaxseeds of the spring brood, I quote from a private letter from Mr. John Marten.* He says, "I have found but few of the spring brood of larvæ, as I wrote you in my last, and no flaxseeds; but on June 8, I found an adult female sticking in the oil on my lamp in my room. During the subsequent week I found four others on lamps. I was not well enough at the time to go to the fields, or I might possibly be able to report something more interesting now."

I append a tabular exhibit of the observations reported above in order to bring the details more clearly under the eye.

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* Mr. Marten was for a long time assistant of Dr. Cyrus Thomas, my predecessor in the office of State Entomologist, and is in every way an intelligent and competent observer, thoroughly acquainted with the Hessian fly, in whose midst he has lived for years.

CALENDAR.

1883.

No.	Date.	Larvæ.	Flaxseeds.	Imagos.	Remarks.
1	April 10..		Centralia	Centralia	Breeding Cage
2	" 14..		Centralia	Centralia	Breeding Cage
3	May 5..	DuQuoin			
4	" 17..	Odin	Odin		
5	" 24..	Decatur			
6	" 28..			DuQuoin	Bred from No. 3
7	June 3..		Macoupin Co.		
8	" 12..		Granville		
9	" 4-15..			DuQuoin	Bred from No. 3
10	" 26..		Warsaw		
11	" 29..		Godfrey		
12	" 30..		Jerseyville		
13	July 4..		DuQuoin		
14	" 7..		Effingham		
15	" 9..		Villa Ridge		
16	" 20..		DuQuoin		Living larvæ
17	Aug. 5..		DuQuoin		
18	" 7..		DuQuoin		Living larvæ
19	Sept. 6..		Centralia		Living larvæ
20	" 6..			Centralia	
21	Dec. —..		Kansas		
22	" 9..	Anna	Anna		
23	" 27..		Albion		

1884.

24	Apr. 9..		Marshall		
25	May 19..	Albion			Just hatched
26	" 21..		Marshall		
27	" 25..	Robinson	Robinson		
8	" 26..	Robinson	Robinson		
9	" 27..	Mt. Carmel	Mt. Carmel		
0	" 30..		Carmi		
31	" 31..		Eldorado		
32	June 2..	Robinson	Robinson		
33	" 3..		West Union		
34	" 3..		Villa Ridge		
35	" 4..		Anna		

Calendar—Continued.

No.	Date.	Larva.	Flaxseeds.	Imago.	Remarks.
36	June 6..		DuQuoin		
37	" 7..		DuQuoin		
38	" 14..	Robinson	Robinson		Young
39	" 17..		Robinson		
40	" 17..			Villa Ridge	Bred from No. 34
41	" 18..		Anna		
42	" 20..			Villa Ridge	Bred from No. 34
43	" 20..		Robinson		
44	" 20.			Marshall	Bred from No. 26
45	" 22..			Anna	Bred from No. 35
46	" 22..			West Union	Bred from No. 33
47	" 24..		Robinson	Robinson	
48	" 24..		Anna		
49	" 25..		Marshall		Contained liv'g larvæ
50	" 27..		Robinson		
51	" 28..			Robinson	Bred from No. 47
52	" 28..			West Union	Bred from No. 33. Insects in copulo
53	" 30..		Robinson		Living larvæ
54	July 1..		Marshall		
55	" 5..		Marshall		
56	" 7..		Villa Ridge		Living larvæ
57	" 12..		Anna		
58	Oct, 20..	Robinson			

Although on a subject as difficult and important as that of the midsummer history of the Hessian fly it is probably best to await additional data before attempting to establish a final conclusion, it must be admitted that the facts above stated strongly suggest the hypothesis of a normal completion, before harvest, of the transformations of a considerable part of the destructive spring brood of the larvæ.

It is with a sense of disappointment that I make this statement, as this condition of things greatly diminishes the value of midsummer measures for the protection of our wheat fields, if it does not indeed render them almost wholly useless. While undoubtedly the burning of the stubble in the summer and other measures of the sort must destroy a considerable number of larvæ and pupæ, it seems possible that enough adult flies will have escaped before harvest to continue the species in scarcely diminished numbers.

It may be objected that the earliest imagos that escape from the spring brood of larvæ may immediately lay eggs, and thus give origin to an intercalated brood of larvæ which form flaxseeds before harvest,—perhaps in immature and stunted plants; but it was to this point above all others that our attention was especially given this year; plants of all ages, from infested fields, being examined by hundreds at a time, with almost microscopic thoroughness and care with the express purpose (and I may add the lively hope) of discovering such young larvæ. The results of all this labor were, however, absolutely negative. Not a single larva was found which it seemed at all possible to suppose could have descended from flies of later origin than those escaping from the flaxseeds which had spent the winter in the fields.

PARASITES.

Surprisingly little of a definite and accurate character has been published on the parasites of this interesting and important insect, and nearly all the facts now current have been derived from almost the first competent observer of the fly in America. The only species carefully described is *Semiotellus destructor*, first noticed by Say, and studied, as to its habits and life history, with some care by him, and especially by Prof. Herrick, of Yale College in 1833. One other parasite, *Platygaster error*, has been described by Fitch, but its life history has been only imperfectly worked out and inaccurately stated. A few other forms have been mentioned, without names or full descriptions, by Herrick, Fitch and Cook.

The data herein presented are in themselves very incomplete, but are as full and definite as I have been able to make them, with two years study, in respect to the life histories of the parasitic species found to affect the Hessian fly in Illinois in any important way.

The common *Semiotellus destructor* is here redescribed in detail and descriptions are given of three new species bred from infested wheat, and mention is made of two others not fully studied,—and for all these species I have given full abstract of our breeding cage records.

It is proper to say that, as my studies were made with principal reference to the life history of the Hessian fly itself, I was especially solicitous to depart as little as might be from the natural conditions of the species, and hence did not remove the flaxseeds from the straws, as would have been desirable for the breeding of the parasites only. From this it results that some of the parasitic species may have infested other wheat insects than the Hessian fly. Indeed, as *Eupelmus allyni* appeared quite frequently in these breeding cages, and as this species has been supposed to be parasitic on the wheat straw worm only, it is not impossible that some of our straws were inhabited by this last species also, and that some of the new parasites herein mentioned belong to Isosoma.*

Semiotellus destructor, Say.

Order Hymenoptera. Family Chalcididæ.

This is far the commonest of the parasites of the Hessian fly in Illinois, 85 per cent. of those appearing in our breeding cages (excluding Eupelmus) belonging to this species. It has been repeatedly described by Say, Fitch and Packard, but so imperfectly or inaccurately that I have not found it easy to identify the species positively. Not doubting, however, that our most abundant form belongs here, I give a fresh description of both sexes, carefully drawn from alcoholic specimens.

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*Prof. Riley writes me that he has repeatedly bred *Eupelmus allyni* from the Hessian fly.

DESCRIPTION.

Male.—A minute black bronzed insect, 1.9 mm. long, with the abdomen blotched with white at base.

Head bronzed greenish black, thickly coarsely punctured on all the exposed surfaces, convex before without frontal grooves, concave behind, .64 mm. wide by .68 mm. in vertical depth; eyes and ocelli dull red, the former oval in outline, the posterior margin more convex than the anterior, broadest above the middle, .27 mm. in vertical diameter, .15 mm. in antero-posterior; ocelli in a triangle on the vertex, lateral ones a little nearer to the eye than to each other.

Antennæ inserted below the middle of the front, 1.4 mm. long, 13-jointed, counting the minute third and fourth joints and not including a minutely rudimentary apical one; four basal joints yellow, remainder black, joints from the fifth to the tip densely clothed with erect black hairs, each segment with a ring of a few long appressed yellow hairs; the scape or first joint is about .3 mm. in length, second joint one-third that length, third and fourth minute, measuring together about .03 mm., visible only under a high power, the fifth measuring .11 mm. in length. The joints from the fifth to the tenth are slightly compressed, and gradually decrease in length; the eleventh, twelfth and thirteenth joints are more closely united, forming a cylindrical club with a pointed tip, the thirteenth joint being conical. The first joint of the club is about equal to the joint preceding. The minute apical process is about .06 mm. in length.

The thorax is .9 mm. in length, about half as wide in front as long, widest between bases of front wings, where it measures .63 mm. Color bronzed greenish black on all surfaces, densely coarsely punctured everywhere, like the head, and provided, as is the head, with scattered minute yellowish hairs. Thoracic sutures are deeply impressed. Prothorax with hind margin deeply concave, and sides with deep obliquely vertical grooves. Mesothorax with straight transverse sutures in front of the scutellum; parapsidal grooves extending half way to this transverse suture. Sides of mesothorax widely excavated obliquely forward and upward from the coxæ. Scutellum somewhat vaulted, narrowed forwards, post-scutellum narrow. Mesonotum declivous, convex from side to side, dorsal outline nearly straight.

Wings coarsely hairy throughout; front wings 1.4 mm. long, .64 mm. wide at widest part, hind wings .1 mm. in length; stigmal branch of fore wing nearly as long as costal vein, expanded at tip; postcostal vein vanishing insensibly towards tip of wing. Very slight traces of median and submedian veins may be made out by close examination.

Legs slender, posterior pair longest, ends of tibiæ nearly attaining the tip of the abdomen; spurs of middle tibiæ stout, curved at tip, nearly as long as first joint of tarsi. Tarsi all similar, spinous beneath, first joint longest, others shortening to the fourth, the fifth about as long as the second. Tibiæ all white, tarsi white except the last joint, which is dusky. All the femora more or less dusky, pale at each extremity; trochanters pale, the coxæ bronzed like the thorax.

Abdomen shining, impunctured, about 1.2 mm. long by .45 mm. wide, oval in outline, narrowing toward either extremity; seven distinctly visible segments, the first about as long as the two following, second short, seventh conical. General color of the abdomen piceous or bronzed black, first segment bronzed green at the extreme base with a quadrate yellow patch above, which sometimes extends on to the second. A similar but paler patch beneath, covers the first three or four ventral segments. All the segments are sparsely hairy upon the posterior half.

Female.—The female is extremely similar to the male, but may be distinguished at once by the abdomen and the antennæ, the former being more broadly ovate, more acutely pointed, and bearing a sting-like ovipositor beneath, usually indeed exserted at the tip. The color of the abdomen is darker, the pale area at the base being smaller, less definite and of a chestnut tint. The antennæ are pale throughout, somewhat shorter than those of the male, with the joints less hairy and more distinct. The club is pointed ovate, shorter than that of the male, and not distinguishable into separate joints, so that the recognizable segments in the female antennæ are eleven in number instead of thirteen, as in the male. The club is equal in length to the two joints preceding, the tip acuminate and slightly recurved.

LIFE HISTORY.

Our earliest* specimens of this species were obtained June 3 from Hessian fly larvæ, collected on that date at Villa Ridge, in extreme Southern Illinois. The earliest collection from which this parasite emerged was made on the 27th May at Mt. Carmel, the adult Semiotellus appearing on the 22d of the following month. The latest examples of this species to appear in our breeding cages emerged July 26, from flaxseeds collected on the 24th June at Anna, Illinois. Further details respecting the periods of this species will be found in the table at the end of this paper.

It is worthy of note that although our breeding cages containing straw and stubble infested by the Hessian fly were all reserved for more than a year, no examples of this parasite occurred therein in spring, although by Herrick it is reported to emerge at that time.

Pteromalus pallipes, n. s.

(Plate IV. Fig. 1.)

A short thick species with the head broader than the thorax, the abdomen ovate and obtuse. Head and thorax bronzed black, thickly set everywhere with punctures of medium size. The occiput and the dorsum of the thorax with a few scattered appressed hairs. The front of the head is vertically grooved for the long first joints of the antennæ. Eyes pale red, mouth parts brown. The antennæ are about as long as the head and the thorax, thirteen-jointed, the first joint pale yellow, second joint dusky, the remaining joints black. The first joint is about equal in length to the four following, the third short, that and fourth together shorter than the second and about equal to the fifth, the joints widening from the first to the fifth, (except the third which is not wider than the second), the following joints to the eleventh of about equal diameter, thence tapering rapidly, the last three not being clearly distinguished. The first joint is nearly smooth, the second somewhat hairy, all the others black-pubescent, each with a transverse ring of long appressed yellow bristles.

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* Although it has been heretofore supposed that the winter brood of the larvæ of the Hessian fly was never parasitized, I find among our breeding cage notes an entry to the effect that six living chalcid parasites were taken on the 10th May, 1883, from a cage in which multitudes of Hessian flies had been bred, the wheat containing them having been collected April 10, at Centralia, Ill.,—a date so early that only the winter brood of larvæ could possibly have occurred in it. I greatly regret that, owing to a removal of my office, I can not get access at this writing to the specimens on which this statement was based.

The meso-scutellum is broadly rounded behind, the sides with an irregular excavation, the meta-scutellum with an elevated margin and an evident median carina. The sides of the metathorax are densely clothed with long black hairs.

Wings transparent, veins dusky yellowish, the post-costal and stigmal of equal length, about two-thirds as long as the costal. Wing membrane sparsely pubescent, the veins with a row of stiff, erect black hairs. Patagia dusky yellowish.

The legs are pale yellow throughout, except the coxæ, which are of the body color. The abdomen is smooth and shining except the under sides of the three posterior segments which are pubescent. It is black above and piceous beneath, the edges of the segments being somewhat tinged with brown.

Length, 2.5 mm.; head, .95 mm. wide; thorax, .7 mm. by 1.06 mm. long; antennæ, 1.25 mm.; wing, 1.9 mm.

The specimens from which the above description was drawn, were all winged and were bred June 5, 1884, from flaxseeds and larvæ of the Hessian fly, obtained at DuQuoin, in Perry county, July 4, 1883.

The breeding cage from which these specimens emerged yielded no other parasites, but, when examined, were found to contain empty pupa cases punctured as if for the escape of parasitic insects, together with a few containing dried up larvæ.

Pteromalus ? fulvipes, n. s.

(Plate IV. Fig. 2.)

Under this head I describe, with some hesitancy, several specimens whose generic relations it is difficult to make out, owing to the fact that all the examples obtained were wingless. The essential resemblance to Pteromalus leads me, however, to place the species under that genus.

The head and thorax a dark bronzed green, and the abdomen above, dark steel-blue. The head is not grooved in front for the first joint of the antennæ, but is, like the thorax, thickly punctured throughout, somewhat more coarsely so than in *P. pallipes*. The dorsal outline of the metascutellum is concave, the metathorax being nearly truncate posteriorly, owing to a tuberosity projecting from its upper posterior part. Metascutellum not margined or carinate. Antennæ eleven (thirteen) jointed, joints distinct except the third and the last three. In the female the first joint is pale yellow, the second dark fuscous, and the remaining joints black. All but the first thickly black pubescent, those beyond the second having each a circlet of long appressed hairs.

In the male the antennæ are pale yellow throughout, similar in appearance to those of the female, but with the last two joints closely united, forming a compact ovate club. In both sexes two minute sub-joints occur between the second and third joints. Wings in all the specimens seen rudimentary, legs pale, the coxæ, femora and upper half of the tibiæ, tawny yellow, the remainder of the leg being pale yellow, except the tip of the tarsus, which is dusky. Abdomen smooth, blue black above, lightening into piceous beneath, ovate, acute, in the female; smaller, obtuse, and more nearly oval in the male.

Total length 2.12 mm.; head, .7 mm. wide; thorax, .45 mm.; abdomen of female, .62 mm. by 1.05 mm.; antennæ, .82 mm.

This species appeared in our breeding cages of the Hessian fly during the months of June, July and August, in 1883 and 1884. Flaxseeds collected August 7, 1883, at DuQuoin, from stubble in the field, yielded the parasite August 17; parasites emerged June 21 from flaxseeds collected at Marshall on the 21st of May; those obtained at Robinson, in Clark county, May 25, emerged from the flaxseed June 20; and others obtained at Robinson, June 14, gave the parasites July 10.

Tetrastichus carinatus, n. s.

A slender, smooth, dark steel-blue species, 2 mm. in length, with pale legs, four-jointed tarsi and eight-jointed antennæ.

The head is very short, not wider than the somewhat slender thorax, impunctured, as are also the thorax and abdomen. Eyes large, dark red, broadly elliptical, occupying the whole longitudinal diameter of the head and even encroaching upon its posterior surface. Front broadly bisulcate for the reception of the scapes of the antennæ. Antennæ short, eight-jointed, joints very distinct, except those of the ovate club, (three in number), which are very closely compacted. Second joint shorter than the third, which is longer than fourth and fifth, these being subequal. First and second joints of the club nearly equal, thicker than the preceding. Flagellum of the antennæ pale, provided with a few erect black hairs, and long appressed yellow ones.

Prothorax is very short; the mesoscutum very long, narrowing posteriorly, when it is broadly truncate against the scutellum, regularly convex, minutely carinate longitudinally on the middle line; parapsidal grooves complete. Scutellum vaulted, with two longitudinal carinæ. Abdomen of female pointed ovate, broadest in front of the middle, somewhat flattened above.

Legs rather long, pale yellow; fore tarsi dusky, middle and hind tarsi dusky at tip; all the tarsi four-jointed, first joint of front and middle tarsi shorter or no longer than the second, that of hind tarsi longest of all.

The entire surface is very sparsely provided with coarse yellowish hairs, longest and most numerous at the tip of the abdomen.

Costal vein very stout, provided with unusually long hairs; stigmal vein short; postcostal nearly obsolete; no trace of median or submedian.

This species was bred with the preceding in our breeding cages from the collections made at Anna June 24.

As a summary exhibit of the facts concerning the life histories of the species above described, I append a table showing in detail the dates of collection and emergence for each, including also, for convenience sake, *Eupelmus allyni*, from the same breeding cages.

CALENDAR.

SEMIOTELLUS DESTRUCTOR.

Catalogue No.	Place of Collection.	Date of Collection.	Date of Emergence.
2353	Robinson	May 26, 1884	June 22, 1884
2350	Mt. Carmel	" 27, 1884	" 22, 1884
2362	West Union	June 3, 1884	" 28, 1884
2194	Villa Ridge	" 3, 1884	July 1, 1884
4259	Villa Ridge	" 3, 1884	June 3, 1884
2185	Anna	" 4, 1884	June 13—July 18, 1884
2349	Anna	" 6, 1884	June 22—July 10, 1884
2269	DuQuoin	" 7, 1884	June 20, 1884
4358	Anna	" 24, 1884	July 10-26, 1884
2370	Robinson	" 27, 1884	June 27, 1884
4349	Robinson	" 30, 1884	July 10, 1884
4356	Marshall	July 7, 1884	July 7, 1884

PTEROMALUS PALLIPES.

2200	DuQuoin	July 4, 1883	June 5, 1884

PTEROMALUS FULVIPES.

2310	Marshall	May 21, 1884	June 21, 1884
2309	Robinson	May 25-6, 1884	June 20-1, 1884
4357	Robinson	June 14, 1884	July 10, 1884
4566	Marshall	June 25, 1884	July 26, 1884
3806	DuQuoin	Aug. 7, 1883	Aug. 17, 1883

TETRASTICHUS CARINATUS.

4358	Anna	June 24, 1884	July 10-26, 1884

Calendar—Continued.

EUPELMUS ALLYNI.

Catalogue No.	Place of Collection.	Date of Collection.	Date of Emergence.
2194....	Villa Ridge..................................	June 3, 1884....	June 13—July 1, 1884............
2185....	Anna	" 4, 1884....	" 13— " 18, 1884............
2349....	Anna	" 6, 1884....	" 22— " 10, 1884............
2269....	DuQuoin	" 7, 1884....	" 20, 1884 ....
4358....	Anna	" 24, 1884....	July 10-26, 1884, ...
4566....	Marshall	" 25, 1884....	" 26, 1884.......................
4349....	Robinson	" 30, 1884....	" 10, 1884.......................
4356....	Marshall.....................................	July 7, 1884....	" 7, 1884.......................
3806....	DuQuoin	Aug. 7, 1883....	Aug. 17, 1883....................

As a general result of these observations, we may say that, with the single exception of *Pteromalus pallipes*, all the parasites bred by us from wheat containing the Hessian fly emerged before the August following the laying of the eggs from which they hatched, and that the former species survived the winter in the flaxseeds of the flies, not emerging until the succeeding summer.

4. NOTE ON THE WHEAT MIDGE.

(*Cecidomyia tritici*, Kirby.)

Order DIPTERA. Family CECIDOMYIDÆ.

(Plate IV. Fig. 3.)

This frightfully destructive enemy of wheat appeared during the last summer in extreme Northern Illinois in numbers and under circumstances to demand the attention of the economic entomologist; and although its life history and habits have long been well known, its occurrence in the West in numbers sufficient to attract attention has been so rare, that very little is known of it by the farmers of our State. It consequently seems best to give here a brief report of the observations made this summer in the wheat fields of McHenry county, together with a synopsis of its life history and such recommendations of remedial measures as are warranted by our present knowledge of the insect.

My attention was first called to its prevalence in that region by a letter, dated July 25, from Mr. R. W. Lane, of Chicago, who transmitted heads of wheat from Genesee Depot, Wisconsin, which I found to be seriously infested by the midge. Thinking it possible that the same insect was at work in adjacent parts of Illinois, I visited the fields of the Fox River valley from Elgin northward, on the 30th and 31st of that month. In every field but one which I entered in the vicinity of McHenry and Ringwood, where spring wheat only was raised, I found the midge larva upon the heads of wheat, usually in only here and there a blackened head. In some fields, however, these damaged and shriveled heads were so numerous as to have apparently reduced the crop from ten to twenty-five per cent.; an injury which the farmers had noticed, but which none had been able to account for to their satisfaction, the presence of the midge having entirely escaped them. The heads upon which it occurred were those which had filled imperfectly—sometimes containing no plump kernels, and sometimes fairly well filled except at the tip of the ear.

From the account of its life history, given later, it will be seen that the midge was now near the end of its life above ground, and no doubt by far the greater part of those which had previously infested the wheat had already entered the earth. The wet weather of the preceding week had in fact supplied the conditions most favorable to this migration of the larvæ.

There were not, on an average, more than three or four midge larvæ to a head, and these were commonly found on the outside of the glume, only occasionally on the kernel within. The observations here given should at least serve to put the farmers of the northern part of the State on their watchful guard against this insect,—the most dreaded and destructive foe of spring wheat known to agriculture; and in the hope of making them personally acquainted with this enemy of their harvests, I append here a sufficient description and figures to enable the reader to recognize the insect in its various stages, and such an account of its life history as will justify the recommendations made for the limitation of its increase.

DESCRIPTION.

Egg.—The eggs, as laid upon the wheat, are scarcely more than a hundredth of an inch in length, about one-sixth as thick as long, of a long oval form, very nearly cylindrical, with rounded ends. Their surface is smooth and shining, and they are almost colorless-watery, with a faint tinge of pale red. When several are together, in a mass, they appear of a deeper reddish yellow color.

Larva.—The larvæ are, at first, less than a hundredth of an inch long, resembling the egg closely, from which, however, they may be certainly distinguished by the fine transverse lines separating the segments. When under examination the larva is usually quiescent unless placed in water, when it immediately awakes from its seeming sleep. When wet and in motion (alternate contraction and elongation) several parts of its structure not perceptible before are plainly visible.

The quiescent larva is about three times as long as broad, measuring .08 in. by .03 in., and is oval, thickest in the middle and slightly tapering in each direction, the ends being rounded or but faintly angular-pointed. It is slightly depressed and on the under side very perceptibly flattened, but with no indications of feet. Its surface is minutely granular, like that of the common earth worm of our gardens, and also appears to be slightly coated over with a glutinous secretion, whereby it adheres to a needle which touches it, and often when two or more worms are placed in contact they in dying become glued to each other. Its joints are indicated by very fine impressed transverse lines, whereby it is divided into ten or twelve segments of equal length, except at the ends where it is difficult to definitelv distinguish them. It is of a rich yellow color varying in different individuals from lemon to orange-yellow, and usually a small greenish or blackish cloud is seen placed lengthwise in the middle of the body on its under side, which is evidently caused by internal alimentary matter.

The moving larva is of a more elongated and elliptic form, tapering to an acute point at its fore end and much more blunt behind. Thirteen segments are now plainly to be seen. Of these the three first and the last have a smooth surface and are whitish and semi-transparent, only the nine intervening ones being yellow and with their surface granulated. Each segment is fringed at its end with a row of small hairs like eyelashes, which are continued along the whole length of the edge. The head is conical, longer than broad, tapering to an acute point in front, and has a depression on each side near the middle where is inserted a short thread-like process, forming with its fellow a pair of horns, which are articulated at their bases. The last segment is cut off transversely in a straight line; but as the worm crawls, when it draws the hind part of its body forward with each step it takes, this hind end becomes strongly concave. When the worm is dry and endeavoring to crawl on a dry surface, this end of its body becomes wholly different. It is then strongly concave, its angles acute and tooth-like, with two similar teeth between them which may be of the same size or retracted, showing their points only. On each side of this last segment a rounded tubercle is sometimes protruded from beneath, bearing a conical point and resembling a proleg. Under the same circumstances the head is wholly retracted, leaving only the ends of its horns visible.

Puva.—The cocoons in which the larvæ enclose themselves resemble little round grains smaller than a mustard seed. When coated with dirt, as they usually are, it is almost impossible to discover these cocoons even with the aid of a magnifying glass. The naked larvæ that are sometimes found in the earth in the spring are doubtless those which remained in the wheat after its harvesting.

Imago.—The following remarks condensed from Fitch's Report will constitute a sufficient description of the imago to enable the intelligent observer to recognize it, especially when taken in connection with the figures, copied on a larger scale from Fitch's plate.

The individuals of this species differ so widely as to color, size, and perfection of organs and members, that no study of these points will enable one to distinguish this fly from other species when specimens are gathered in other situations than on wheat. We can then recognize it only when it shows the following essential characters:

The body nearly one-tenth of an inch long, bright orange or lemon-yellow, and tarnished or slightly smoky on the back, forward of the wings; the wings clear and glassy and having a small cross vein near their base; the antennæ about as long as the body and composed of twelve oblong joints which are narrower in their middles and separated by short pedicels.

We are assured a midge-fly is this species when it possesses all these characters. But many flies also pertain to this species which do not fully possess them, some departing from the standard in one, others in another particular, whereby it happens that no one of these characters is constant and found in all the members of this species. All the bright yellow midges which occur in our wheat fields during the latter half of June may be regarded as the wheat midge.

LIFE HISTORY.

The fly or perfect insect makes its appearance in ordinary seasons a little before the middle of June, in the latitude of New York, but its hatching varies with the latitude and the progress of vegetation. A warm season hastens, a cold season retards insects and vegetation alike. Under ordinary circumstances this fly lives about three weeks, but if the season be wet and the fly numerous it is seen abroad much longer, sometimes until the middle of August. Moisture is its life, dryness smothers and suffocates it, consequently it cannot remain upon the wheat heads during the heat of the day, but rests upon the lower part of the stalks until the sun begins to decline, when it returns to its operations upon the heads. On damp cloudy days the insect is as active in the day as at night, and spots shaded by trees, or wheat on low lands, are the most severely injured. If at the time the fly is abroad, depositing its eggs, the weather be extremely dry, the crop escapes; if unusually wet weather prevails, the grain will be severely injured.

In the deposition of its eggs the only aim of the fly seems to be to place them in some crevice of the headlet where they will be comparatively secure from enemies, and sheltered from the sun and air, which would shrivel them. From the form and character of the ovipositor it is evident that the fly is restricted to crevices for the deposit of its eggs. They are, perhaps, most commonly placed in the little orifice at the summit of the outermost chaff, but may be found in any narrow opening upon the headlets which the fly is able to discover. Sometimes a single egg is found, but they are usually in clusters of from two to ten. The young larvæ appear in about a week after the egg is laid. In whatever situation hatched, they must find their way at once to the germ or kernel from which they derive sustenance. Attaching themselves first at the base of the kernel they afterwards, as they increase in size, usually withdraw farther up the side. The larvæ mature in about three weeks and may often be seen descending to the ground as early as July 11, while some of the parent flies are still depositing their eggs. Some of the larvæ throw themselves to the earth with a skip from the beards; others crawl down enveloped in a pellicle of water; and still others crawl in a serpentine track till the globule of water in which the larva is moving becomes so large that it is upon the point of running down the straw, when the larva lets go its hold, and is carried to the earth.

It is a mistake to suppose that only the larvæ which go into the ground before harvest live and produce the flies of the following year. Experiments indicate that few if any of the larvæ would be dead at the end of even six months. Their vitality is astonishing. No extremity of hunger or thirst seems to kill them and water does not drown them. They are perfectly amphibious.

INJURIES TO GRAIN.

This insect effects its injury by sucking the milky juice from the young kernel, without any apparent gnawing of the surface, thus causing the grain to shrivel and blight, the heads remaining substantially unfilled. Not unfrequently the crop is utterly ruined, and the loss in whole states, like New York and Ohio, has occasionally reached a total of two-thirds or three-fourths the entire average yield.

REMEDIES.

No application of remedial or preventive measures has hitherto arrested the ravages of the midge, although it is not impossible that they have somewhat mitigated the gravity of its attack. The only ones hitherto suggested which even promise usefulness are those of destroying the screenings of the mill when the wheat is threshed and cleaned immediately after harvest; or, for the purpose of getting rid of the midge larvæ remaining on the grain, that of deep plowing of the old fields of wheat with the hope that the larvæ remaining in the ground may thus be buried beyond the hope of resurrection, when their transformations are completed the following year.

Besides these, we have the heroic remedy of refraining from the cultivation of wheat where the success of the crop is threatened by the previous appearance of the midge,—doubtless the most effective measure provided it be generally adopted.

5. The Wheat Bulb Worm.

(*Meromyza americana*, Fitch.)

Order Diptera. Family Oscinidæ.

(Plate IV. Figs. 4-9.)

Since the outbreak of this insect in Fulton county, described in my report for last year, it seems to have entirely disappeared from that locality, not a single field, this year, having given the slightest evidence of its presence; a fact doubtless due to the destruction effected by the parasite described by me in the article above mentioned.

Indeed, in all our observations and collections made in different parts of the State during the past season, no evidence was seen of anything more than trivial injury by this insect until late in October, when Mr. N. S. King, of Normal, called my attention to a field of rye which had been mysteriously checked in its growth and seemed likely to be entirely ruined. An examination of this field made on the 31st October showed that the outer stalks of nearly every stool were dead, although, owing to the recent rains, new leaves were being sent up from the center of the stool. The stand was light upon the ground, but the owner reported that it had been excellent at first. On examination, the greater part of the dead stalks were found to harbor the larvæ of Meromyza about half grown. When taken from the stalks these larvæ traveled with considerable activity, using their mouthhooks to draw themselves forward.

This field of rye was sown unusually early (July 9) for pasture, a fact entirely consistent with respect to the conditions favorable to injury by this pest. Late sowing remains the only preventive measure against it.

6. THE GRASS WORM OR FALL ARMY WORM.

(*Laphygma frugiperda*, Guen.)

Order LEPIDOPTERA. Family NOCTUIDÆ.

(Plate V. Figs. 1 and 2.)

An abundant southern insect well known in fields of cotton and corn in the Southern States, but rarely noted in Illinois, has twice appeared in this latitude in numbers so extraordinary as to attract general attention and to do very considerable mischief in fields of young winter wheat in autumn, and once in corn fields in midsummer. It first appeared here fifteen years ago, and has since been seen only by entomological collectors, until the autumn of the present year. Its occurrence was first announced to me on the 2d October by Mr. H. C. McIntire, of Topeka, Tazewell county, who wrote:

"I have this day mailed you a box containing specimens of a worm that is devastating wheat fields in this part of our county. They hatch on land that was in oats this last year, and they are eating the wheat clean. Hundred of acres in this part of the county are as clean at it is possible for land to be, not a green thing left. From land that was in oats, they go to wheat that was in wheat last, eating it clean as they go."

Two days later, Mr. F. E. Buckley, of Tremont, wrote me:

"There is a worm working in the winter wheat in this section, which is causing much consternation among the farmers. Many call it the army worm. In a field of wheat of twenty acres, visited by the writer this morning, this pest could be seen working in large numbers. Throughout the entire field there were probably on an average, from a dozen to a dozen and a half worms to the square foot; worms from one-fourth to one-half inch in length to full grown ones. A full grown one is about one and a half inches in length. They seemed to have entered my wheat from an adjoining corn field on the north, and are working towards the south. In many places the oats is quite thick, as the wheat was sown upon oats stubble. But the worms do not touch the oats. They cut the wheat off close to the ground and eat it up clean, or else climb the spears and eat it down."

On the 9th I visited Tremont, and saw the species at work in the wheat fields, although it had at this time nearly closed its career for the season, by far the greater part of the brood having entered the earth for pupation. On the 10th and 11th, an assistant, Mr. C. A. Hart, made a trip through the fields of Tazewell and Mason counties, carefully observing the insect in the field and collecting specimens for the breeding cages.

LITERATURE.

This species was first described by Smith and Abbott, in their "Rarer Lepidopterous Insects of Georgia," in 1797, under the name of *Phalæna frugiperda.* Its character as an injurious agricultural insect was first observed in the Southern States.

In a description of the imago and larvæ by Guenée, in his work on Noctuelites, Vol. I, p. 159, published at Paris in 1852, the general distribution of the moth of the grass worm is given, as known at that time.

In the Patent Office Report for 1855, is an article by Townend Glover on Cotton Insects, containing a somewhat extended account of this species under the title of "grass worm" or "grass caterpillar," but without scientific name. A description of the larva and moth are given, and figures of these and also of the chrysalis. A valuable account of the habits of the larvæ in Georgia, of their injuries to vegetation, and of their destruction by ants is also given in this article.

The earliest notice of the occurrence of this species in the Valley of the Mississippi with which I am acquainted, is contained in the first report of Mr. C. V. Riley, as State Entomologist of Missouri [1868]. On page 87 of this report he mentions the injuries to wheat due to this insect, (especially to wheat sown upon oat stubble), and makes some suggestions of preventive measures against its attacks in future. The farmers of this region, however, reported to him that the same insect had been known to attack the wheat in the fall, for many years previous. Mr. Riley uses no technical name in this article, but calls the larva the "wheat cutworm."

The earliest mention of its occurrence as an injurious species in Illinois, was made by Walsh and Riley, who in a paper on the boll worm or corn worm (*Heliothis armigera*), published in the American Entomologist for November, 1869 (Vol. II, p. 42) report having received our species from Tuscola, in Central Illinois. Not recognizing it, they regarded it as a new species of Prodenia, and proposed for it the name *Prodenia daggyi.* They reported it as feeding externally upon the leaves of corn, and likewise eating into the heart of the young plant.

On page 328 of the same volume, Riley reports the receipt from many parts of Missouri and Illinois of the "fall army worm," its injuries being most marked in the northeastern part of Missouri. He here distinguishes the species from the true army worm, adds several plants to its dietary, and doubtfully identifies it with the species previously called by him the "wheat cutworm."

Following this, on page 363, in the number for December, 1870, occurs a long article upon this insect, which is there called the "fall army worm," and described and discussed as *Prodenia autumnalis* n. s. The moth and larva are figured and very fully described, a brief description being also given of the pupa. Two varieties of the imago are distinguished and described as *fulvosa* and *obscura*; the occurrence of the worm in destructive numbers during that season in many parts of Kansas, Illinois and Missouri is noted; comparison of its characters and habits with those of the common army worm is made at length, the probable number of its broods and other points in its life history are discussed, and an account is given of its habits of oviposition, and a description of the egg. In Riley's second report, page 41, this species is referred to as *Laphygma frugiperda* of Smith and Abbott, but evidently not identified by the writer with the "wheat cutworm" of his previous report.

In his third report, that for 1870, Riley again recurs to the subject, treating the grass worm at length, but now under the name of *Prodenia autumnalis.* This article is substantially the same as that already mentioned, published in the Entomologist and Botanist for December 1870, but with some additional details with respect to its injuries to vegetation in Missouri and also concerning its life history and parasites.

These observations of Riley are referred to next in the report of the United States Department of Agriculture for 1871, but no additional particulars are there given; and in the report for 1872 of this series the occurrence is recorded of the "grass army worm," as it is called, in Georgia, in destructive numbers, devouring corn, grass, and pea crops.

In the Eighth Annual Report of the State Entomologist of Missouri page 48, Mr. Riley again refers to it in an article on the true army worm, and in a foot note concedes the identity of the species with the *Phalæna frugiperda* of Smith and Abbott and the *Laphygma frugiperda* of Guenée.

The "grass army worm" is first mentioned in the Illinois Reports in the seventh of the series, pages 97 and 219, in a brief article by Prof. Thomas, compiled chiefly from previously published notices, but containing some additional particulars respecting its life history in that part of Central Illinois where it was first observed.

Mention of its carnivorous habit under peculiar circumstances as reported by Mr. Glover in the Report of the Department of Agricultural for 1855, (p. 100) is made in Prof. Comstock's elaborate report upon Cotton Insects published by the United States Department of Agriculture in 1879.

I have also seen a brief notice of its occurrence in cotton fields, in Bulletin No. 3, of the United States Entomological Commission, where its is barely mentioned as sometimes very abundant in cotton fields and likely to be mistaken for the true cotton worm (Aletia.)

In the American Entomologist for January, 1880, advanced sheets of the above article were printed containing the same notice.

In the Tenth Report from this office, a brief paragraph containing no new information is devoted to this species. In the Report of the Entomologist of the United States Department of Agriculture printed in the Report of the Department for 1881 and 1882, Mr. Riley speaks of this species while discussing insect injuries to growing rice, noting its occasional injury to that plant, and making suggestions for the arrest of its ravages when they become serious. In Mr. J. A. Lintner's First Report as State Entomologist of New York (1882), the grass worm is simply included in a list of species injurious to the apple.

NOMENCLATURE.

This insect, as already remarked, was first described under the name of *Phalæna frugiperda*, and has since received the scientific names of *Prodenia daggyi*, Riley; *Prodenia autumnalis*, Riley; and *Laphygma frugiperda*, usually incorrectly printed *Laphrygma* in the articles of Walsh and Riley.)

Its common names have been equally numerous. The prevalent one in the Southern States is, apparently, the "grass worm" or "grass caterpillar," while to the northward it has been, perhaps more generally, called the "fall army worm." Riley first gave to it the name of wheat cutworm, and by many it is erroneously styled the "army worm," on the supposition that it is the fall brood of that far more common and destructive pest. In order to avoid this erroneous association of our species with the common army worm, it seems to me decidedly best that the name of *fall army worm* should be dropped and that of *grass worm* be commonly used instead.

DESCRIPTION.

Imago.—Front wings narrow, apex broadly rounded. General color brownish grey, varied with bluish white, dusky and fulvous. A bluish white patch at the apex of the wing, usually containing a few black points. Subterminal line arcuate, of the same color, continuous with this patch in front, sometimes obsolete at the terminal angle of the wing, but sometimes complete. Before the subterminal line and within the apical patch is a dark blotch upon the middle of the wing, which sometimes contains one or two triangular black points. Transverse anterior and transverse posterior lines sometimes obsolete, when present, double, zigzag. Base of wing slightly paler, with a longitudinal black blotch in the middle. Orbicular spot obliquely oval, pale testaceous, with an oblique mark of same color immediately without. Reniform spot obscure, distinguished in front and behind by small whitish blotches, the posterior linear, often shaped like the letter *e*, the anterior variable. Upon the costal margin, a series of whitish dashes, four of them between the reniform spot and the apex, and as many more, obsolete, between that and the base. Terminal line pale, subterminal space dark, divided into quadrate blotches by the nervures. Fringe paler gray, the scales tipped with black between the nervures. Under surface smoky but paler anteriorly and terminally and fulvous along the costa. Posterior wings translucent, nearly white in some lights, roseate in others, dusky on anterior margin and on anterior half of outer margin. Head, thorax, and abdomen, nearly uniform gray; thorax with a V-shaped black mark in front.

Larva.—The larvæ collected this autumn were dark, the general effect being that of a nearly black insect with a broad buff band below the stigmata, and a narrow yellow subdorsal line. The dorsum is black or a very dark brown with a yellow median line, and irregular white lineations along the border of the dorsal space. The subdorsal band is also black, slightly mottled along the lower margin, bordered above by a yellow line which is itself bordered above and below by a shade of deeper black. The stigmatal band is drab, mottled with pale brown; the stigmata black, partly within the substigmatal band and partly within the subdorsal band. In one specimen, the dorsum is pale chocolate brown with scarcely a trace of the median line. The heads in all are jet black except on the sides, behind the eyes, where they are somewhat mottled with whitish. The Y-shaped mark upon the front is white and deeply impressed. The cervical shield is black, with the median line and subdorsal yellow lines continued upon it. Upon the caudal shield the median line widens to a more or less triangular blotch. The labrum is brown, the basal joint of the antennæ is wholly white, the second joint white with a black ring at the base, and the third joint brown. The venter is greenish brown beneath the buff lateral band, becoming nearly yellow towards the bases of the prolegs. Each of the latter has a glossy black patch upon its outer surface. Between these legs the surface is a brownish green. The whole ventral area is finely mottled with yellow.*

DISTRIBUTION.

By Guenée, this species is reported to occur in North and South America, and likewise to have been received by him from Tasmania.

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*The following is the description of the larva and pupa of this species given by Mr. Riley, on page 117 of his Third Report as State Entomologist of Missouri:

Larva.—Ground color very variable, generally dark and pitchy black when young, but varying after the last moult from pale brown to pale dirty green, with more or less pink or yellow admixed—all the markings produced by fine, more or less intense, brown, crimson, and yellow mottlings. Dorsum brownish with a narrow line down the middle, rendered conspicuous by a darker shade each side of it. A dark, subdorsal band one-third as wide as each joint is long; darkest at its upper edge, where it is bordered and distinctly separated from dorsum by a yellow line which, except on joint 11, where it deflects a little upwards, is quite straight; paler in the middle of each joint. A pale, either buff or flesh colored substigmatal band, bordered above and below by a narrow, yellow and wavy line. Venter pale. Head pale yellowish brown, with sometimes a tinge of green or pink; the triangular piece yellowish, the Y-mark distinct and white, the cheeks with four more or less distinct lateral brown lines and with dark brown mottlings and nettings, which become confluent and form a dark curved mark at the submargin behind the prongs and each side of the stem of the Y. Stigmata large, brown, with a pale annulation, and just within the lower edge of the dark subdorsal band. Legs either light or dark. Cervical shield darker than body with the narrow dorsal and subdorsal lines extending conspicuously through it; anal plate also dark, narrow and margined by the pale subdorsal lines—both plates furnishing stiff hairs, but without tubercles. Piliferous tubercles on joints 2 and 3, arranged in a transverse row, and quite large, especially on joint 2; on joints 4-10 the superior eight are arranged as follows: 4 in a trapezoid in dorsal space, the posterior two as far again from each other as the anterior two, and two near the stigmata, one above and one behind; on joint 11 the dorsal 4 are in a square, and on joint 12 in a trapezoid, with the posterior and not the anterior ones nearest together; the thoracic joints have each a large subventral tubercle just above the legs. Length 1.10-1.50 inch. Described from numerous specimens.

Pupa.—Formed in the ground, without cocoon; of normal form, bright mahogany-brown, and with a distinct forked point at extremity.

It seems to be abundant throughout the Southern States, but I do not know of its occurrence north of the latitude of Central Illinois. The destructive outbreaks which I have encountered in my reading on this species, occurred as follows: In 1845 and 1854, in Georgia; 1868, in Central Illinois and Northeastern Missouri; 1870, Kansas, Illinois and Missouri; 1872, Central Georgia; 1873, Washington county, Illinois; and 1881, in Georgia.

In Illinois, this autumn, we found it generally distributed in destructive numbers throughout the eastern two-thirds of Tazewell county and all of Mason county. From D. S. Harris, of Cuba, in Fulton county, and from Dr. R. Boyer, at Lewiston, I heard that it had generally prevailed in that county. Letters from Menard, Mason, Macon and Madison counties to the east and south, and from Stark on the north, reported no occurrence of the worm in those regions, and fixed the limit of the outbreak in those directions; but to the west it extended to the Mississippi river, having been reported by correspondents in both Pike and Hancock* counties. The area infested was therefore a triangular one, the apex of the triangle being near eastern McLean county, and the base extending along the Mississippi from Pike to Hancock.

LIFE HISTORY.

In 1854, the caterpillars were abundant in Georgia during the last days of September and the beginning of October. "When about to change," says Glover, "they formed cocoons of silk under stones or in the ground near the surface, interwoven with particles of earth, and came out perfect moths from the 24th to the 30th of October; and, as these specimens were kept in a room without artificial heat, I conjectured that those in the open field would appear about the same time." They were also believed to have injured the rice in that State in June of the same year.

In Missouri, in 1868, the larvæ were received by Riley on the 10th of October. They came to their growth the latter part of October and entered the earth, where Riley believed that they would pass the winter in the chrysalis state.

In 1869, Walsh and Riley received specimens from Central Illinois in July, and the moths made their appearance towards the end of the same month.

In 1870, Riley expressed the opinion that there are at least two broods, and probably three or four in a year. "Those worms which appeared," he says, "in such multitudes in August and the fore part of September, in due time produced moths, and these gave birth to a new generation of worms, which began to make their presence manifest towards the end of October. And it will be remembered that, as stated in our last number, we bred the moth as early as July, in 1868, from worms received from Mr. Daggy."

In the above year they were noted in Central Missouri on the 26th of August. In 1881 they occurred on the rice in Georgia, in May, going into the ground for their transformation in the first and second weeks in June; and a later brood occurred in August.

During the present autumn they were first noticed by our correspondents during the third or fourth week of September, at which time most seemed about half grown; but by October 10 the greater part of them were already in the ground, where most of them still continue. Few pupæ occurred at this time, most being in the shortened, prepupal stage. From the larvæ bred in the laboratory, collected from wheat fields October 11 and kept in a room without artificial heat, three moths emerged November 3, three more November 12, and another between that date and the 28th. The remainder are still alive in the earth as pupæ, at the present writing (December).

The pupæ in the field were usually buried from one to two inches beneath the surface, erect or inclined, in smooth-walled earthen cells. Not a few had only partly hidden themselves before the necessities of metamorphosis overtook them.

From the above data it is not easy to construct any consistent calendar of this species, the statement made by Riley in the Entomologist and Botanist for December 1870, seeming to conflict with the other observations reported. The larvæ occurring that year in "August and the fore part of September" in Missouri, if they really gave origin to a second brood, which "began to make their presence manifest towards the end of October," must have produced the imagos late in September and early in October,—that is at the very period when the brood of larvæ observed by us this fall were completing their growth and entering the ground for pupation, not to emerge until spring. In fact, the statement above quoted seems inconsistent with Riley's own report of his observations for 1868, when larvæ received October 10, entered the ground later in the month, and were believed to hibernate as pupæ, pupation in 1868 thus being made synchronous with the occurrence of growing larvæ of a later brood in 1870. As Riley rests the above cited report for 1870 on no precise data, but makes it only as a general statement, it is perhaps not impossible that it involves an error of inference. More probably, however, it represents exceptional conditions. If we thus exclude it either as irreconcilable with observed facts, or as an unusual occurrence, we have left self-consistent proof of three broods at the South and of at least two, and possibly three, as far to the north as Central Illinois. The larvæ of the first of these appears in May and June, pupating in the latter month and in July, and giving the imago late in this month. A second brood of worms occurs in the South in August, and a third late in September and early in October. The last corresponds to the observations in Illinois this autumn, and probably hibernates as pupæ, with scattering escapes of autumnal imagos, such as have occurred in our own breeding cages this year.

CHARACTER AND EXTENT OF INJURIES TO VEGETATION.

As far back as 1845, this species was reported to attack corn, sugar cane, and upland rice.

In Georgia, in 1854, the grass worms devoured grass, young grain, and almost every green thing which came in their path.

"Instances have been known," says Mr. Glover, "in which, urged as they were by necessity and starvation, they actually devoured stacks of odder that were stored away for winter consumption.

Deep ditches cut in the earth to stop them were immediately filled up by the multitudes which fell in and perished, while eager millions still rushed over the trembling and half-living bridge, formed by the bodies of their late companions, bent on their mission of destruction and devastation.

* * * * When pressed by necessity, however, as has already been stated, they will feed upon cotton leaves. I raised about thirty of them upon this food alone, merely as an experiment, and they grew and perfected their transformations, although appearing to prefer a grass diet if it could be obtained."

In Missouri, in 1868, they destroyed much young wheat sowed on oats ground, but did not trouble wheat sowed in the same fields on wheat stubble. They were here found to feed with equal relish on the young plants of both oats and wheat, and a variety of grasses.

In Illinois, in 1870, they fed in July upon the young corn, devouring the leaves, eating into the heart of the young plant, and, later, boring large holes through the ears, burrowing them in all directions. They were also reported to Mr. Riley to feed upon the leaves of the peach and apple, upon the under sides of which the imagos laid their eggs. If these were deposited upon other trees, like the sycamore, the larvæ, when they hatched, instead of eating the leaves, descended from the trees to feed upon more succulent herbage below.

According to the observations in wheat fields reported for 1868, wheat which had been completely eaten up was not necessarily ruined, some that had thus been cut off in the fall making a good stand the next spring, in one instance, at least, being even better than that which had not been touched.

[On the other hand, Mr. F. E. Buckley, of Tremont, who was the first to report the occurrence of these larvæ to me this fall, writes me this spring that the wheat eaten off was almost invariably destroyed and did not rally again. "On my piece containing twenty acres," he says, "one-third of the ground was bare. Wherever the worms worked, the wheat is killed and did not come up again; and in other instances I know of in this vicinity, the result was the same. One piece of about ten acres sown on very rich ground (oat stubble, of course,) which was completely destroyed, does not show half an acre of living grain."]

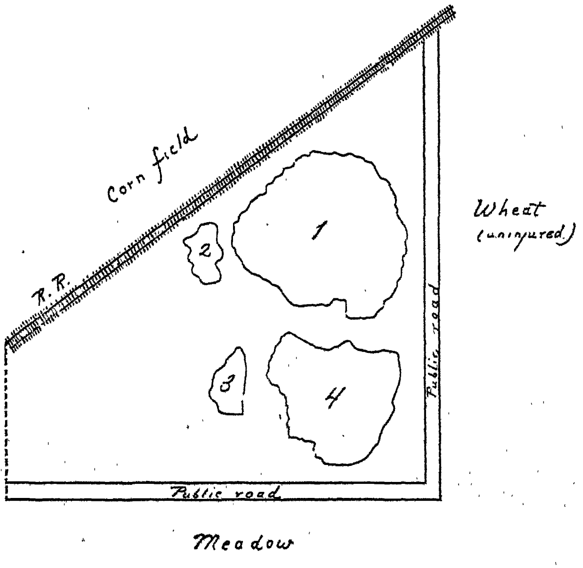
In Missouri, the worms have also been reported to destroy turnips, and buckwheat as it was just coming into bloom; while meadows were so ravaged that nineteen-twentieths of the grass was considered entirely killed. Oats and timothy were among the crops destroyed by them, the former being devoured when it had reached a height of six inches. Corn silks and soft corn were likewise eaten. Corn fodder, tomatoes, rye, potatoes, and cucumbers have been destroyed by them in various parts of Missouri, and in some vineyards they did great damage by gnawing around the stems and causing the bunches to drop off.

In corn fields, they were said by a correspondent of Mr. Riley's, not only to devour greedily the leaves and stems, but to bore large holes through the ears, burrowing them in all directions. In Georgia, in 1872, besides devouring corn and grass, they destroyed the pea crop in some localities. The following year they made havoc with the winter wheat in Washington county, Illinois, in September, devouring the plants when they were two or three inches high; and some small damage was also done to corn. In Mr. Riley's report for 1881 and 1 82, the first and second generations are said to lay their eggs on the growing stalks of rice. The worms, hatching, "rag" the plants badly, and when in great numbers eat them to the ground. Grass, cabbage, strawberries, and beans were among the plants injured in Georgia during this year by a later brood.

In Central Illinois, this fall, the injuries were confined, as far as our observation extended, to old oats ground, with the exception of a field or two formerly in wheat, on which volunteer grain had sprung up in extraordinary quantity. We could hear of no damage noticed in the fields of oats early in the season on ground afterwards visited by the grass worm when cropped in wheat. In very many cases the loss was total, and many thousand acres of winter wheat were entirely killed by the worms in the area infested this year. Most of the fields were plowed and resown, but occasionally one was left. The destruction of a whole field was rarely complete, the bare area being usually in bands and patches, in the center of which the plants were eaten to the ground, while around the margins the damage was less severe. Where the wheat was early sown and had reached a height of five or six inches, stubs of an inch or more were left by the worms, and from these the plant partly revived.

The number of worms in a field, as indicated by the pupæ discoverable in the ground, was about six to ten to a square foot; although some farmers asserted that a handful could have been gathered, earlier, in their fields by a single sweep of the hand.

From Mr. Harris, of Cuba, I have received the following detailed account of the method and amount of the injury done in a field under his observation:



"I send you a rough sketch of a field infested by the grass worm last fall. I visited this field five times after the worms made their appearance, the first visit being about October 1, and the last one about December 6.

Upon my first visit to this field I found the worms actively at work in the spots marked 1, 2, 3, 4, they having seemingly begun at the center of the spaces and worked in all directions. Upon my second visit, the worms had eaten every green thing in space 1, over an area of six or seven acres, and many of them had entered the ground to pupate. In space 2 and 3 they had eaten about one half of the wheat, making it look ragged and thin on the ground. (The spaces indicated as 2 and 3 were about one half acre each.)

In space 4, they had destroyed all the wheat at the center, but had not extended their ravages so far as in No. 1, probably not more than half an acre being entirely eaten off, while about three acres was partially eaten, less damage being done as the boundary was approached.

At this time (second visit), I found more worms at work in No. 4 than in No. 1, but they were scattered over a relatively larger space.

When I returned on my third visit, about Nov. 7, I found No. 1 had been resown with the drill without plowing, while the other infested spaces had not been resown.

These parts of the field presented a yellowish, sickly appearance, and did not recover at all before cold weather. The leaves began to turn brown at the tips and dry up, while there was very little if any growth from the center. Even where the wheat was but little eaten by the worms, it presented a stunted appearance. The worms climbed upon the blades of the wheat and ate them, instead of cutting off the plant at the ground, so there was but little damaged except that actually consumed. But the ravages of this worm are greater than can be accounted for by the actual amount of the herbage eaten. They seem to produce an effect similar to that produced by a too free use of fertilizers upon growing plants.

This field of wheat was sown upon oats stubble plowed under without burning."

NATURAL ENEMIES.

In the Southern States where the common species of ants seem to be much more predaceous and ferocious in their habits than with us, they apparently interpose a notable check on the multiplication of the grass worm.

"At a plantation in the vicinity of Columbus," in Georgia, says Glover, "where the caterpillars were very numerous, and had already devoured all the grass on one side of a field which was divided into two equal parts by a broad and sandy carriage road passing through the center of it, the grass on the other side having been untouched, it was interesting to observe the operations of numerous colonies of ants that had formed their holes or nests in the road, and were lying in wait for any unfortunate grass worm, the natural desire of which for a fresh supply of food, should tempt it to cross this dangerous path. First one ant more vigilant than the rest would rush to the attack; then another, and another, until the poor caterpillar, entirely covered by its pigmy foes, and completely exhausted in strength by its unavailable efforts to escape, was finally obliged to succumb to superior numbers and die as quietly as possible, when the carcass was immediately carried off by the captors to their nests, or, when too heavy to be dragged away at once, they fed upon it as it lay in the road. This warfare was carried on every day as long as the grass worms prevailed, and no doubt their numbers were diminished in this way to a considerable extent."

By Riley the occurrence of considerable numbers of a Tachina parasite was noted in 1870; and we, ourselves, noticed the eggs of such a parasite this fall on at least fifty per cent. of the worms collected by us, most commonly fastened near the head. The imago of one of these parasites emerged in a breeding cage on the 28th November, and believing it new, I sent it to Dr. Williston, of New Haven, Connecticut, who, at my request, kindly furnished me the following description:

Exorista infesta, sp. n., Williston.

"*Female*. Palpi reddish yellow at the tip; third joint of the antennæ about thrice as long as the second; a single row of bristles extends from the front a little ways on the sides of the face above; the bristles of the face below do not reach the middle; legs black; scutellum yellowish, the tip of the abdomen reddish yellow. Length 6–7 mm.

Black. Face grayish white; on each side of the lower part of the face in front there are but three or four minute bristles above the large marginal bristle. Antennæ black, the third joint about three times as long as the second, of nearly equal width, straight on its front margin. Front light ochraceous on the sides, in the middle with a rather broad, parallel, opaque black stripe, reaching from the ocelli to the base of the antennæ; on the lower part there is a single row of not very stout bristles on each side, extending but a little ways on the face. Palpi black, the distal end reddish yellow. Thorax light grayish pollinose, the dorsum showing four rather narrow, black stripes, indistinct behind. Scutellum obscure yellow, or reddish yellow, narrowly black at the base. Tegulæ yellowish white. Abdomen black, the second and third segments very indisstinctly reddish on the sides, the fifth segment almost wholly reddish yellow; second segment opaque; third and fourth shining, broadly whitish pollinose in front, but variable in different reflections. Legs wholly black. Wings hyaline; last section of fourth vein moderately curved inwards, posterior cross vein gently sinuous.

Male. Front narrow above, the median black stripe narrower than in the female, and gently widened in front. Palpi black at the base. The sides of the third and fourth abdominal segment broadly reddish. Otherwise as in the female.

Three specimens: one female (No. 5422), bred by Professor Forbes from *Laphygma frugiperda*, and a male and a female, collected by Mr. Eugene Keen in Fairmont Park, Philadelphia. The females agree closely throughout; the male differs in the broad red sides of the abdomen, but I have scarcely a doubt of its identity."

No other enemies of this pest have been noted except its own fellows, but its cannibalistic habit is quite pronounced and remarkable. Glover says, in the report already cited, "The grass caterpillars, when in confinement, very often kill and devour each other; and when one is maimed in the least, it stands a very poor chance for its life. Several intelligent planters state that, when the grass and weeds are entirely devoured, and no other vegetable food is to be found, they will attack each other and feed upon the still living and writhing bodies of their former companions. One grass caterpillar, which was kept in confinement, although furnished with an abundance of green food, actually appeared to prefer to feed upon other caterpillars, no matter of what kind, so long as their bodies were not defended by long, bristling hairs, or spines."

That this is not a practice to which the worms are impelled by confinement, is shown by the fact that the older worms have been seen to destroy the younger by hundreds when a plenty of other food was available,—a fact mentioned by Mr. Howard in the Report of the Commissioner of Agriculture for 1881 and 1881.

Beyond an occasional dead worm in the fields in October, presenting the *post mortem* appearance of *schlaffsucht*, I saw no evidence of contagious disease among these larvæ, and presume that the Tachina parasite above mentioned will be found the principal enemy they have to fear.

In the past this insect has not been decidedly injurious in the same locality in the Northern States for more than one year at a time, and in the prevalence of parasitism we probably have the explanation of this fact. There is, therefore, little reason to fear a recurrence of the insect in any considerable numbers next year, in the region devastated by it this fall.

PREVENTION AND REMEDY.

The female moths, when searching for a proper place of deposit for their eggs, are evidently attracted to the ground upon which the larvæ do their damage by the presence of an abundance of green food for the latter,—a fact which immediately suggests early plowing of ground intended for winter wheat, as a preventive measure. Doubtless except for the allurement of growing vegetation, the eggs of the imago would be planted elsewhere, or so widely scattered as to effect no appreciable damage.

Certainly in that region where the grass worm prevailed last year it would be prudent to plow early after oats when it is intended to plant wheat.

If, however, this precaution has been neglected and hordes of the larvæ appear in the wheat fields, it will doubtless prove difficult to arrest their ravages. No opportunities for experiment have as yet offered, notice of the appearance of the larvæ in the wheat having been received too late to permit trial of remedial measures; but it may be worth while to suggest heavy rolling as a measure likely to be practicable and efficient in some instances. This has occasionally been found useful for the destruction of the true army worm. One farmer in Mason county, who noticed that the grass worms were extending their ravages rapidly from the central area in which he first noticed them, believed that he destroyed the brood and prevented further injury by plowing under the infested area and rolling it heavily immediately thereafter. If a disposition to migration, like that of the army worm, is apparent, the march of the host may be arrested by measures which have been found more or less efficient in the case of the last named insect; that is, a furrow may be plowed across the line of their march, when the worms collecting therein may be destroyed by dragging a log along the furrow. If their appearance is easily detected while they are still small, it might not be unprofitable to destroy them with Paris green or other form of insect poison, but in most instances it will doubtless be less expensive to resow the ground than to attempt the somewhat doubtful remedies here proposed.

7. THE GRAIN LEAF-HOPPERS.

Order HEMIPTERA. Family JASSIDÆ.

A great number of species of minute leaf-hoppers are found upon growing grain, usually inflicting only insignificant or temporary damage, even if their effect is finally appreciable; but a few species were found by us last summer abundant enough in fields of growing wheat, in May and June, to constitute a menace to the crop where the conditions were not otherwise entirely favorable to its growth. Two of these, confined to the cereal crops as far as our observations show, were new to science; while a third, wide spread, occurring in many situations and upon a considerable variety of plants, is a common species, described originally by Say under the name of *Jassus irroratus*.

The first two are closely allied to *Jassus inimicus*, Say, described in 1831,* the describer of that species adding the remark that it is said to depredate, in the larva state, on the roots of wheat in Virginia.

Cicadula nigrifrons, n. s.†

(Plate V. Fig. 3.)

A moderately slender, yellowish green species, with four black points at the anterior margin of the vertex. The head is sublunate, obtusely rounded in the middle, its antero-posterior diameter next the eyes being about three-fourths its median diameter. Its color is pale yellow, irregularly mottled with white, with an arc of four irregular black points at its anterior margin, the outer of these just above and within the ocelli. There is a slender impressed median line, black or dark brown; and a depressed spot upon each side appears midway between this and the eye.

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* Complete writings, Vol. II, p. 382.

† Although this species differs by characters commonly esteemed generic from the following and from any other genus known to me, yet in the present state of the generic classification of our American Homoptera I have not thought it best to multiply descriptions of genera, but content myself with indicating the distinctive characters in the figures accompanying.

Front, bluish black, with a few yellow median points and a row of transverse yellow lines interrupted across the middle. Cheeks black above, yellow behind; basal joint of the antennæ blackish beneath; clypeus black in the middle and at the margins, yellow at the sides. Lores yellow, bordered with black. Pronotum longer than the head, but slightly narrower, strongly arcuate in front, base nearly straight, yellow anteriorly (where it is also mottled with white), shading to dark green posteriorly, owing to the black tint in the mesonotum showing through the transparent pronotal shield. A few faint dusky blotches just behind the eyes.

Scutellum yellow somewhat mottled with white except two deeper yellow blotches just within the lateral angles. A very slender black impressed line. Hemelytra yellowish hyaline, veins yellowish green; the costal margin broadly thickened, punctulate.

Tergum black, posterior margins of the segments yellow. Thorax bluish black beneath, except the outer margins of the lateral plates of the mesothorax, which are yellow. Abdominal segments blue-black, bordered with yellow posteriorly, the two or three last segments largely yellow-black, or dusky only in front. The hypopygium nearly all yellow, connexivum chiefly yellow irregularly mottled with blue-black. Valvules of the female yellow beneath and behind, black above and in front, spinose with long yellow bristles.

Coxæ all blue-black; anterior and middle femora with about two rings of black, tibiæ irregularly and variably specked or ringed with black, legs otherwise pale, except the points of attachment of the larger spines, which are black.

Total length .14 inch; length of head .001 inch; of thorax .013 inch; of scutellum .013 inch; width of head .038 inch; width of scutellum .025.

This species was collected by Mr. Garman at Mount Carmel on the 28th of May, 1884, where it was abundant in growing oats; at DuQuoin on the 7th June, where he found it common in young wheat and again on the 5th July, when it was obtained by sweeping in wheat stubble. At Anna, July 14, it was very common on young corn, and occasionally occurred upon musk melons, August 2.

Cicadula quadrilineatus, n. s.*

(Plate V. Fig. 4.)

Similar in general appearance to *Cicadula nigrifrons*, but differing in wing veins and color markings. Head with two round black spots upon either side of the middle of the base, about equidistant from the median impressed line and from the eyes. In front of these a transverse black line extending from eye to eye but interrupted at the middle of the vertex, followed by a second heavier line sometimes interrupted and sometimes not, the two being nearly joined by a bar at the ends of the first.

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*Differs from the preceding and from typical European species of Cicadula by some structural characters; but the above generic assignment expresses its true relations.

Face much as in *nigrifrons*, but yellow, with a median black stripe, and black transverse lines interrupted in the middle. Cheeks with less black than in the other species. Pronotum about as in *nigrifrons*, but the dark tint extending farther forward, leaving only a narrow margin of definite yellow, which is sometimes blotched with black in front. Scutellum with black impressed line much broader, usually somewhat lobed posteriorly, and with two round black dots in front of it upon the middle of the scutellum. The black of the mesonotum extends farther back than in the other species, reaching sometimes to the middle of the scutellum, which is then marked in front by an irregular band of black, sending two large triangular processes backwards, with a smaller process between them.

Coxæ green. Upper margins of the thoracic plates much washed with yellow. Thighs striped with black rather than banded. Rostrum black. Fourth ventral segment almost entirely yellow, the second and third with a median yellow stripe. Hypopygium of the female dark, connexivum yellow, slightly blotched with blackish. Valvules of the female chiefly yellow, somewhat dusky above. Tergum black, the penultimate segment broadly edged posteriorly with yellow.

This species was first brought to our notice as an injurious insect May 23, 1884, when it was collected by Mr. Garman in fields of poor young wheat near Decatur, in such numbers as to suggest the probability of its injurious influence. It was this spring collected in large numbers from young wheat at Marshall, May 22, and at West Union on the 24th, where it seems to have been very abundant. At DuQuoin, on the 7th of June, it was found associated with the previous species in wheat, and August 4, a few specimens were collected from sorghum at Champaign. It has occurred rarely also in young corn.

ARTICLE III.—BRIEF NOTES ON SORGHUM INSECTS.

My last report contained a paper on such insects as infest the sorghum plant as were then known to me, and to these I now add a few notes on one of the species therein treated, together with a description of a second species occurring upon the roots, first observed this year.

1. The Yellow Sorghum Plant Louse.

(*Chaitophorus flavus*, Forbes.)

Order Hemiptera. Family Aphididæ.

(Plate VI. Figs. 1-4.)

This species, discovered last year, was first observed July 25, and the facts of its earlier life history were of course unknown, but our observations of the present season carry the record a month farther back.

On the 2.th of June, in fields of sorghum at Champaign which had been replanted, when the plant was only three or four inches high and showed but three or four of the leaves, one of these was occasionally reddened with a small cluster of the above plant lice beneath it. Each of these consisted of a single full-grown female (winged in all cases but one) surrounded by a group of wingless young, sometimes evidently but just born. One of these winged females was dead in the center of a group of still living young. These fields were among those worst infested by this louse last year.

I searched carefully and extensively for root lice, but in vain. Every stalk seen which showed any signs of ill condition was dug up and examined, but no root lice of any sort were found. It seems probable, consequently, that the Chaitophorus emerged from the ground in spring, crawled up to the lower leaves of the young plant, and there commenced at once to multiply; and it seems unlikely that any root form of this species will be found. This year, as last, I noticed that the ants paid no attention to this plant louse, although *Lasius flavus* and other species were not uncommon in the fields at the time.

2. THE SORGHUM BARK LOUSE.

(*Coccus sorghiellus*, n. s.)

Order HEMIPTERA. Family COCCIDÆ.

Among our collections from the sorghum plant made at Champaign this year, was a single vial of specimens bearing a close resemblance to the species of Rhizobius, but evidently belonging to the Coccidæ, a family not hitherto found upon the sorghum plant.

The body is oval, distinctly segmented, .07 of an inch long by .027 of an inch wide, and .024 of an inch deep. The surface was covered by a bluish bloom, and in one alcoholic specimen examined, a waxy mass, including a cluster of long hairs, adhered to the anal extremity. The antennæ are short, reaching to the coxæ of the first pair of legs, distinctly eight-jointed, the first two joints thick and about equal in length, the third as long as the second, but more narrowed, the fourth the shortest of all, about as wide as long. Each of the three following joints is slightly larger and longer than the preceding, and the eighth is as wide as the second, cylindrical, very nearly as long as the sixth and seventh together.

The rostrum is very short, conical, projecting from between the bases of the first pair of legs, not as long as the femur, and its width about half its length. The maxillary filaments are four in number and attain the abdomen.

The eyes, placed upon the sides of the head at a distance behind the bases of the antennæ about equal to the first joint of the latter, are black and simple, each consisting of a single ocellus. The tarsi are all one-jointed, two-thirds as long as the tibiæ and tapering regularly to the single claw, which is strongly curved, with a pair of slender capitate hairs, longer than the claw, springing from its base. Tibiæ and femora of about equal length; antennæ and legs slightly hairy, and scattered hairs occur upon the surface of the body and tip of the abdomen.

The only form seen was the wingless female, and belonged apparently to the genus Coccus, as defined by Signoret.* It was collected August 4.

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* Annales de la Société Entomologique de France, trimestre de 1869, p. 102.

ARTICLE IV.—ON SOME CLOVER INSECTS.

1. *Cymatophora crepuscularia*, Tr.

Order LEPIDOPTERA. Family PHALÆNIDÆ.

(Plate VI. Fig. 5.)

Larvæ from which the above was bred were taken on white clover at Normal, June 21, the imagos emerging July 10. The larvæ were an inch long, slender, with only four prolegs. The head is widely bilobed and reddish brown above, yellowish varied with reddish brown in front, with two small approximate black spots on the middle of the front. The body is green, thickly covered with white granulations, with some black ones intermixed, and has an obscure reddish dorsal stripe. The posterior margins of the middle segments are narrowly bordered with yellow. On the penultimate segment is a large transverse blackish spot, with two small kidney-shaped yellow spots near its middle, approaching each other posteriorly. The legs are pale brown, blackish at base; prolegs pale brown, blackish at base; prolegs black without, pale within; spiracles brown.

The same larva occurred in our collections on the rose and the common locust; taken from the former June 20, and from the latter July 4. We also collected it July 25, from the box elder (*Negundo aceroides*), the specimen pupating August 4, and emerging August 13.

2. THE CLOVER BARK LOUSE.

(*Coccus trifolii*, n. s.)

Order HEMIPTERA. Family COCCIDÆ.

(Plate VI. Fig. 6.)

On the 3d of May, at Normal, there occurred on the roots of white clover examples of a root coccid, resembling Rhizobius in general appearance, but differing from it in the antennæ, and especially in the tarsi and tarsal claw. They were protected by a small yellow ant, *Lasius flavus*, in whose nests they occurred, and were carried away by them like plant lice, when the nest was exposed.

DESCRIPTION.

The body is elliptical, broadly and equally rounded at both ends, nearly circular in transverse vertical section, distinctly segmented; surface covered with a waxy bloom, smooth except for a few small hairs at the anal extremity. Feet, eyes, and antennæ minute. The body is .11 of an inch long, a little more than half as wide, and a little less than half as deep; the abdomen decidedly shorter than the head and thorax; the antennæ .003 of an inch long, their length less than the distance between their bases, obscurely seven-jointed; the first joint as wide as long; the second a little shorter and much narrower than the first; the third and fourth a little smaller than the second and not distinctly divided; the fifth and sixth distinct, equal in length, and about equal to the first; the seventh long, cylindrical, equal to the two preceding, obtusely pointed at tip. Entire antenna minutely sparsely hairy under a high power. Eyes simple, consisting of a single ocellus and a black speck on the side of the head, directly behind the antenna, the third joint of which will about reach them.

Legs .01 of an inch in length, each reaching about one half way to its fellow of the opposite side. Tarsus one-jointed, as long as the tibia, tapering regularly, terminating in a single stout curved claw; tibia and femur of about equal length; trochanter as long as the coxa. Legs very minutely sparsely hairy throughout. Rostrum very minute, in the form of a thick tubercle projecting downwards in front of the bases of the anterior legs, scarcely longer than wide, about half the length of the femur.

3. Clover Mites.

At Normal, early in May, the general occurrence of a large and conspicuous brownish red mite was noticed upon clover and blue grass, the former of these plants, especially, sometimes suffering severely from the pest. The leaves of the clover turned yellow and their growth was arrested where the mite was abundant. The effect upon the blue grass was similar. The species, which proved to be new, is here described by my first assistant, Mr. H. Garman.

Bryobia pratensis, n. s., H. Garman.

(Plate VI. Fig. 7.)

Body oval in outline as seen from above or below; but little elongated. Outline as seen from the side also oval, increasing in depth towards the posterior extremity where it is abruptly truncated. Strongly convex above, much less so below. Entire surface rugose with more or less parallel, waved striæ. Striæ of dorsal surface of abdomen coarser and more regular than those of the ventral surface and of the cephalothorax.

With scattered, curved, finely denticulate, scale-like appendages attached to the dorsum and at the margins. These scales expand uniformly from their bases to their tips, where they are widest and have slightly rounded denticulate margins. The four conical prominences which extend forward over the mouth parts at the anterior extremity of the cephalothorax, each bears one of these scales. The two median prominences are longest, and are united at their bases. Palpi very stout, the basal articles with a few long hairs; inner ramus of forceps thumb-like and with spinose hairs; outer ramus a strongly curved hook.

Legs with strong, plumose, spine-like hairs on their basal articles, which hairs grow less and less stout towards the distal extremity of the limbs until upon the distal articles they form long, slender setæ. Anterior legs equal to the body in length, tapering but slightly to the distal extremity. Two basal articles about equal, the proximal slightly the stronger. Third article longest, twice the length of the sixth. Fourth article nearly as long as the sixth, about half the length of the fifth. Adhesive hairs fewer and more slender than those of the other legs. Legs of the three posterior pairs much shorter than the anterior, and with less difference in the lengths of the articles composing them.

The eyes consist of two approximated ocelli on each side of the cephalothorax. Adults in life marked with red and black. The pattern has been destroyed by alcohol. The majority of those examined have large anal protuberances.

Length of body .038 inch; width of same .025 inch.

With the above, another mite, similar, but paler and smaller, was frequently taken in meadows. It is thus described by Mr. Garman:

Bryobia pallida, n. s., H. Garman.

A small, pale species agreeing with *B. pratensis* in general form. Anterior legs slightly longer than the body, with the fourth article markedly shorter than the sixth. Scale-like appendages somewhat wider and shorter proportionally. Two outer of the frontal processes wider at their tips than those of *B. pratensis.* Median pair of processes more slender than the outer and united for half their length. Color whitish. Length of body .024 inch; width of same .015 inch. Occurs with the preceding on grasses in meadows. The anal protuberance is conspicuous in most of the examples seen.

4. MISCELLANEOUS NOTES.

The larva of *Hæmatopis grataria*, Fabr., was seen at Effingham, August 21, abundant upon white clover.

Dichelia sulphureana, Clemens, was repeatedly bred from clover leaf rollers during the season.

From small green leaf rollers collected on clover May 14, imagos of *Cacœcia rosaceana*, Harris, and of *Tortrix pallorana*, Robs., (Plate VI, Figs. 8 and 9) were bred, the imagos emerging during the middle of June. The latter species was also bred from the common ragweed, (*Ambrosia trifida*), specimens collected May 16, pupating June 12, and emerging six days later. Another example collected on *Erigeron canadense*, May 17, pupated in a fold of the leaf May 30, and completed its transformations on the 7th June. From other clover leaf rollers taken May 23, examples of *Hypena scabra*, Fabr., emerged.

II.

Contributions to Horticultural Entomology,

ARTICLE I.—ON NEW AND IMPERFECTLY KNOWN STRAWBERRY INSECTS.

1. NOTE ON THE LIFE HISTCRY OF THE STRAWBERRY SLUG.

(*Emphytus maculatus*, Norton.)

Order HYMENOPTERA. FAMILY TENTHREDINIDÆ.

(Plate VII. Fig. 1.)

In my article on strawberry insects published in my report for 1883, I found myself obliged to leave in doubt an important point in the life history of this insect owing to the conflict of observations as reported by previous writers on this species.

In the fullest and most authoritative article upon it, that by Mr. Riley in his Ninth Report as State Entomologist of Missouri, the statement is made that it is double brooded, the adult flies of the first brood appearing by the end of June and the beginning of July. "Under the influence of July weather," he says, "the whole process of egg depositing, etc., is rapidly repeated, and the second brood of worms descend into the earth during the fore part of August, and form their cocoons, in which they remain in the caterpillar state through the fall, winter, and early spring months, till the middle of April following, when they become pupæ and flies again as related."

On the other hand the observations of Mr. Saunders, made in London, Ontario,* those of Mr. Galusha and Miss Smith, in Central Illinois, as reported in the Transactions of the State Horticultural Society, and the statements of Prof. French, in Southern Illinois, published in the same Transactions; together with those of Miss Alice B. Walton, relating to the life history of this species in the latitude of Muscatine, Iowa;—all report the absence of a second brood, or report their failure to detect it, the dates given by Mr. Saunders being, in fact, inconsistent with it.† The point thus left in uncertainty is practically the most important in the life history of this insect, since if two broods occur (the second appearing after the fruit is gathered), the multiplication of the species may be easily and cheaply arrested by the application of hellebore or arsenical poisons to the vines in July; but if, on the other hand, the spring brood is the only one, it must be combatted, if at all, while the fruit is on the vines, when no poisonous application would be permissible. To determine this point for Central Illinois, careful observations were made throughout the season, and a large number of individuals were reared.

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*Fourth Report of the Ontario Entomological Society, page 18.

†For these references see my report for 1883, p. 71.

On the 12th May, in Normal, McLean County, newly hatched larvæ of this species, were observed upon strawberry leaves, and numerous eggs with the partially developed larvæ within them. These eggs, some of which were kept for identification until the larvæ emerged, were not placed in the petiole, as observed by Riley, but were thrust beneath the epidermis on the upper side of the leaf, a crescentic slit having first been made by the ovipositor of the female. Attempts were made to carry these newly hatched larvæ through their transformations, and a few of them survived until June 5, at which date they were about half grown. Several young Pentatomidæ, apparently Euschistus, appeared in the cage at this time, and to their predaceous habit the disappearance of the larvæ was attributed.

On the 13th of June, strawberry slugs of this brood were found upon the leaves in the field, and on the 21st about 150 specimens were collected and placed in a breeding cage. These were fully grown, and began at once to enter the earth, nearly all having disappeared by June 24. On the 19th of July, those in the earth were examined, and found much shortened up for pupation but not yet transformed. At this time strawberry fields where they had been previously abundant, averaging as many as two or three to each leaf, were swept carefully and extensively with an insect net, but not a single strawberry slug was found.

On the 1st September, the larvæ in the earth were examined but found still untransformed, most of them enclosed in small cocoons. On November 24, these conditions were practically unchanged; one of the larvæ was dead, although yet fresh, but the others examined were living and in perfect condition.

[Delay of publication permits me to add that the above saw-flies were emerging May 14, 1885, from the lot secured for breeding June 21, of the year before.]

The above experiment shows conclusively that in the latitude of Central Illinois, and during ordinary years, the strawberry slug or false worm has but a single brood, and that this is matured before the strawberry harvest is completed, a fact which so modifies the possibilities of effective attack upon the species that we are practically limited to the application of pyrethrum or other harmless insecticides for the purpose of destroying the larvæ, and to the use of the insect net for the collection of the adult flies as they appear upon the vines in May for the deposit of their eggs, and later for the capture of the larvæ. These last are detached from the leaves at a touch, and I doubt not may be collected without great trouble or expense by sweeping with an insect net. From this they could be shaken at intervals into a bucket of water covered with a film of kerosene.

2. THE LESSER STRAWBERRY PLANT LOUSE.

(*Siphonophora minor*, Forbes.)

Order HEMIPTERA. Family APHIDIDÆ.

This species, first described last year from strawberry plants at Normal, has been, observed during the last season, throughout the central and southern part of the State, from Bloomington and Champaign to Alton and Centralia. It was first noticed this year, April 17, on strawberry plants at Normal, only the wingless form occurring at that time. It was collected at Centralia, August 6, and at Alton as late as September 25, at which time it still occurred only upon the under sides of the leaves. It has not thus far done any appreciable injury as far as known.

3. THE TARNISHED PLANT BUG.

(*Lygus lineolaris*, Beauv.)

Order HEMIPTERA. Family CAPSIDÆ.

(Plate VII, Fig. 2; and Plate VIII.)

This species, treated as a strawberry insect at considerable length in my last year's report, has been carefully observed this season, to determine some unsettled points respecting its life history and its injuries to the strawberry. Our notes began April 1, when Mr. Webster was sent to Southern Illinois to collect the facts relating to the life history of this species in spring. At this time he found the adult abundant among the young and tender leaves of mullein, both in strawberry fields and elsewhere,—not down among the older, lower leaves, where they would naturally have resorted if in search of warmth and protection only. That they were feeding upon the plant was shown by the abundance of greenish fluid with which their bodies were distended. Very few specimens were found except those upon these plants.

On the 4th April a pair were taken *in copula*, and on the 7th I dissected eggs from the ovary of the female, seemingly fully developed. On the 2d, large numbers of the adults from Southern Illinois were fed with strawberry plants and mullein in a breeding cage at the Laboratory, in the hope of obtaining their eggs and determining their breeding habits. They resorted chiefly to the mullein, but soon commenced to die from some cause not determinable, both males and females perishing rapidly. On the 17th a pair of these were seen *in coitu*, and on the 18th the plants contained in the cage were thoroughly searched for eggs, but without success. On the 22d I saw and watched for some time a specimen on the under side of a half-open strawberry leaf, with its beak inserted in the midrib, evidently feeding upon the plant, and this observation was repeated next day, the plant bug now piercing the petiole of a fully-expanded leaf.

Description of Egg.—On the 26th April, careful search was again made of the strawberry plants in the cage, and a single egg was found on the petiole of a dead leaf, so loosely placed among the hairs that it fell off on handling the plant. This egg was unmistakably that of Lygus, as was shown by comparison with those obtained from the female by dissection. It was slender, cylindrical, slightly curved, round at one end, truncate and compressed at the other, the longer diameter of this truncate end being three times that of the shorter. The angle nearest the concave side of the egg was produced so as to make this outline somewhat sinuate. The egg was smooth, shining, pale watery yellow, .92 mm. long and .25 mm. in diameter at its widest part. The greatest diameter of the truncate end was .22 mm., and the shortest .077 mm.

The adults were found coupling in the field April 23, on flowers of the common cowslip (*Caltha palustris*), upon which they were now very abundant. They were not noticeably numerous in strawberry fields until late in April, when a few were observed in Union county, seemingly attracted by the opening blossoms. At this time they were also extremely common upon blooming currant bushes at Normal.

The young of the year first appeared about the middle of April, upon strawberry plants at Anna, and were abundant there by the 3d May. At Normal the species was not found in strawberry fields until the 12th May, and these were all adults of the preceding year.

In pursuance of my recommendation, Mr. F. S. Earle, of Anna, made some field experiments upon this species with pyrethrum, applying it quite thoroughly on one or two of the worst affected areas in his strawberry plantation. The pyrethrum used was purchased in the market, and was understood to have been effective upon other species of insects. It was diluted with from one to three parts of flour and applied with a sulphur bellows, first to about half an acre of Bidwell plants, when they were a little past their fullest bloom, and the application repeated in two or three days over about half the area. In each case enough was used to dust the plant quite thoroughly. It was also dusted on nearly an acre of Duchess plants, after the bloom had mostly fallen. Mr. Earle reported that a day or two after the application, he made as careful an estimate as possible of the number of plant bugs remaining on the rows which had been dusted and on those which had not, and concluded that there were from one-half to one-third less on the dusted rows. As this result hardly seemed to justify the trouble and expense of application, nothing further was attempted.

I am not able to account for the unsatisfactory results of this experiment as compared with laboratory experiments made the preceding year at Normal and described in my last year's report, but incline to suspect the quality of the pyrethrum.

The fact that the adults are very generally attracted in great numbers to turnips, cabbage, mullein, and other succulent plants in fall and spring, makes it possible that the number of the following brood in any limited area might be considerably diminished by bordering the field with a row of some of these plants as an attraction to the adult plant bugs. Those lured in this way might then be destroyed with pyrethrum in spring.

3. *Lophoderus velutinanus*, Walk.

This species, already mentioned as occurring in corn, was likewise bred from the strawberry this year, a leaf roller collected July 20 pupating on the 25th, and emerging at a date unknown as the imago of this species.

4. SUPPLEMENTARY NOTE ON THE STRAWBERRY ROOT WORMS.

Order COLEOPTERA. Family CHRYSOMELIDÆ.

In my report for last year appeared an elaborate article on these insects, (pp. 150–177), containing an account of the curious correlation of the life histories of the species included under this head, by reason of which they attack their food plant successively, the three species jointly occupying the ground as larvæ throughout the year. With a view to verifying this account, all opportunities have been improved for further observation, and the data thus collected are here given, together with additional economic notes.

Paria aterrima, Oliv.

On the 9th May this species was seen near Normal *in copula*, on raspberry leaves, upon which the beetles were feeding, during May and the first part of June.

In response to an urgent letter of inquiry from Mr. Wm. Jackson, at Godfrey, respecting the complete destruction by insects of some fields of strawberries in his neighborhood, I sent an assistant thither September 25, with directions to ascertain the cause of the injury. Three fields were visited at Upper Alton and Godfrey. In two of them the greater part of the leaves had been riddled and killed, only a few in the center of each stool remaining green. The third was so far gone, from the same cause, that it had been recently plowed up by its owner.

Careful search of these fields revealed no insect capable of doing this mischief except *Paria aterrima*, and this was so abundant as to give good ground for the suspicion that it was the author of the damage,—a suspicion fully confirmed by the fact that in the recently plowed field, the young leaves occasionally put forth had been freshly gnawed in the manner characteristic of the work of this species. It is possible that the extensive damage to these plants was largely due to the earlier work of the larvæ in the roots.

Scelodonta nebulosus, Lec. and *Scelodonta pubescens*, Mels.

(Plate IX. Fig. 1-3.)

The collections of this season and the results of breeding cage experiments all serve to confirm our former account of the life history of *S. nebulosus* and yield the further interesting fact of the occurrence, beside, of another very similar species, which feeds only on the evening primrose (Œnothera), and whose life history is very different from that of the first.

The strawberry species was bred by us June 9 to 23, from larvæ collected in Southern Illinois from April 6 to 9. Two larvæ obtained April 7, seemingly only half grown, yielded small adults June 13.

The primrose species (*pubescens*) was first noticed by us in Southern Illinois, April 4, on the primrose along the borders of strawberry fields, where it was found *in copula* at that date, and also on the 16th and 19th of the same month. Specimens transferred to breeding cages at Normal were also seen copulating as late as May 13 and 20.

Confined in the breeding cage, these beetles ate freely of the leaves of the primrose, soon killing one of the plants exposed to them, but refused to touch the strawberry, those plants placed with them on the 19th April having been uninjured May 25.

No eggs were found in our breeding cages, nor did any larvæ develop in the jars of earth containing the plants on which the adults were feeding. The primrose species certainly hibernates as an adult, laying its eggs in spring, the old imagos living at least until midsummer; but the further life history is unknown. As its occurrence in strawberry fields may sometimes needlessly alarm the strawberry grower, the distinguishing characters of the species are worthy of mention.

In *nebulosus* (from the strawberry) the form is thicker, the thorax more convex dorsally and less rugose at the sides, and the elytra much more closely punctured. Counting from the sutures to the humeral tuberosity there are seven or eight more or less distinct rows of punctures in *nebulosus*, and about fifteen such rows in *pubescens*.

ARTICLE II.—ON A FEW GRAPE INSECTS.

1. *Petrophora diversilineata*, Hübn.

This insect, well known as injurious to the grape, has heretofore been considered single brooded (except possibly in extreme southern latitudes) and supposed to winter in the larval stage, but an observation made last year indicates that it is double brooded in Southern Illinois.

Larvæ collected on the grape in Union county, September 13, 1884, were found in the imago stage in the breeding cage February 7, 1885, although the date of their appearance is not known. In Dr. Packard's Monograph of the Phalænidæ of North America, the occurrence of the imago is recorded in New York and Massachusetts from July 3 to August 17, and our autumnal larvæ must consequently have been the descendants of that brood.

2. The Vine-loving Fruit Fly.

(*Drosophila ampelophila*, Loew.)

Order Diptera. Family Drosophilidæ.

(Plate IX. Figs. 1-3.)

From Mr. A. Williams, of Moline, Illinois, I received, October 10, a bunch of grapes containing great numbers of a white footless maggot by which most of the berries had been hollowed out, with the information that this insect was making havoc with most of the grapes in his vicinity. These specimens were bred and yielded great numbers of the above common pomace fly—one of the most abundant species in orchards in autumn, when the fallen fruit is rotting upon the ground. This fly likewise swarms around cider mills, the larvæ breeding in vast numbers in the pomace.

In a later note Mr. Williams remarks: "This maggot has nearly ruined the entire crop in this locality. It began on the vines about four years ago."

This species, first described in 1862 by Loew, has been several times noticed by economic entomogists,—chiefly by Lintner and Comstock, the former of whom published an article upon it in his first report as State Entomologist of New

York (1882), and the latter, an illustrated article in the Report of the Entomologist of the United States Department of Agriculture for the same year. By Lintner the species was treated chiefly on account of its injuries to preserved fruits, and was by him given the name of the pickled-fruit fly. Prof. Comstock describes and illustrates the species fully, less with reference to its own injuries than for the purpose of enabling the fruit grower to distinguish it clearly from the apple maggot—a very much more destructive insect.

The fly is of wide distribution, occurring throughout Middle and Southern Europe and Southern Africa, as well as over Eastern North America. It is, in August, September, and October, one of the most numerous of species, wherever an abundant fruit supply is accessible, as it multiplies rapidly by many successive generations. By Prof. Comstock, each of the three preliminary stages—egg, larva, and pupa—is reported to continue from three to five days, and in some cases the fly begins to deposit its eggs when not more than two days old, the entire generation thus completing its cycle within less than a fortnight.

By both Lintner and Comstock the fact of its injury to grapes is mentioned upon the authority of correspondents, the first remarking in a foot note, that examples of the fly had been received by him from the Rev. Samuel Lockwood, of Freehold, New Jersey, with the statement that the larvæ had infested his ripe grapes during the autumn of 1881. Prof. Comstock's information of this habit was obtained from a correspondent in New York, who reported the larvæ to eat out completely the inside of the grapes "which while hanging on the vines, have first been picked open by birds. The decaying juices running out on the other berries of the cluster, spread decay and thus give more foothold for the larvæ. Indeed, the larvæ bore from one grape to another, while the imagos are constantly, by eggs, putting in new colonies until the cluster is nearly or quite destroyed, nothing remaining but the empty grape skins."

By Prof. Lintner, the same species was bred from jars of pickled plums to which the adults had doubtless got access while depositing their eggs.

No natural enemies of this species are thus far known, and it is not easy to suggest feasible remedies for its injuries in the vineyards. Unquestionably the practice of enclosing the clusters in paper bags, as is customary for protecting grapes from rot and birds, would be effective against these insects also; and it will doubtless be decidedly to the interest of the vine grower to prevent the accumulation of decaying and fermenting fruit about his premises where the larvæ may breed.

THF GRAPE LEAF MITE.

(*Phytoptus vitis, Landois.*)

Order ACARINA. Family PHYTOPTIDÆ.

The occurrence in the vineyards of Europe of a microscopic leaf mite, first described by Landois under the above name, has been known for a number of years, the injury resulting being conspicuous and serious, and amounting in fact to one of the established and recognized diseases of the vine; but in this country nothing of the sort has hitherto been reported. On the 15th May, in a vineyard near Normal, belonging to the Phœnix nursery, I observed two grape vines of the variety known as "Taylor's Bullet," the leaves of which were curiously curled and crumpled, on some of the vines scarcely a leaf remaining unaffected. A careful examination of the injured surfaces under a microscope, demonstrated the existence on the under surface of the leaves, of considerable numbers of a minute Phytoptus having the general appearance of that described from European vineyards; and a further search in this vineyard showed a large number of other vines more or less seriously affected, some rows of young Clintons being in fact so extensively diseased that hardly a leaf could be found which did not give evidence of the presence of the mite.

Upon Concords immediately adjoining, and other thick-leaved and woolly varieties, there seemed to be neither trace of the injury nor of the Phytoptus. It is possible, however, that the mites were actually present on these leaves, but that these varieties were not susceptible to injury by them. Owing to the thick felt of hairs upon the leaf surface, it would have been extremely difficult to demonstrate the mites even if they had been present in considerable numbers.

The injury presents the form of peculiar warty elevations upon the upper surface of the leaf, and corresponding depressions on the under surface, these varying in size from one-twentieth to one-tenth of an inch in diameter, although adjacent elevations are frequently fused into irregular patches of much greater size. The larger veins of the leaf did not share in this deformity, and the effect was a distortion such as might result from a shortening of these veins and the consequent folding and crumpling of the leaf. The diseased leaves were much smaller than natural, and were frequently more or less folded together lengthwise, and the edges were also sometimes considerably incurved. On the older foliage, where the injury was of longer standing, the elevations on the upper surface were more or less browned or reddened, but when fresh they were still the natural green of the plant. Many elevated spots upon these leaves were pale, sometimes almost transparent, owing to the defective formation of the chlorophyll—a complete demonstration of the interference with the function of the leaf and the consequent effect upon the vigor of the plant, produced by these parasites.

The European writers describe and figure a peculiar development of abnormal hairs (technically called an erineum) upon the concave surfaces of the diseased patches on the leaves, but in the Clintons and Taylors nothing of this sort occurred, the inner surfaces of the cecidii (as these morbid elevations are called) being entirely smooth and destitute of pubescence of every kind. It is possible that the absence of an erineum was due to the early period at which the injury was observed, but I think it more likely that it is to be accounted for either as due to the difference in species of the American and the European grapes and the consequent difference in the reaction of the leaf from the injuries inflicted, or else that the species of Phytoptus occurring here is not actually identical with the European leaf mite—a supposition in favor of which I shall adduce some further proof. It is worthy of remark that upon even the worst infested plants at Normal the youngest or smallest leaves were usually quite uninjured.

This same mite was subsequently found by my assistant, Mr. Garman, upon wild grapes in Southern Illinois, producing upon the leaves there an identical deformity. It seems extremely improbable that the European species could have been conveyed to this country and have become so wide spread as to reach the wild vines in forests without having hitherto attracted attention in vineyards; and I am consequently inclined to believe that the vineyard mite of America has spread in the reverse direction—that it is a native species probably belonging to our wild vines, and has from them entered our vineyards.

Indeed microscopic study of the mite itself discovers some minor points in which it disagrees with the figures and descriptions of the European *Phytoptus vitis.* The body is less strictly cylindrical, and the lateral branches of the tarsal plume are less numerous. The descriptions of the European forms by Landois and Briosi are however so inconsistent with each other (the original description of Landois giving, for example, one hundred and twenty as the number of abdominal rings, and that of Briosi from sixty to sixty-six) that it is impossible to make an intelligent comparison of our form with theirs without authentic specimens. I have consequently treated our species under the old specific name.

The specimens examined by me varied in length from .45 to .64 of an inch, and in greatest diameter from .014 to .019 of an inch. The body is broadest immediately behind the legs and thence tapers regularly, as seen from above, to the posterior extremity. The rings number about sixty-five; the tarsal plume has certainly but four lateral filaments, and not five, as reported for *Phytoptus vitis* by both Briosi and Landois.

Plant diseases due to Phytopti have hitherto been controlled only by the use of sulphur, the method being described in my First Report, page 142. As such applications are already in use for fungus affections of the grape leaf, they will doubtless be found conveniently applicable for Phytopti in the vineyard.

ARTICLE III.—ON NEW INSECT ENEMIES OF THE BLACKBERRY AND RASPBERRY.

1. The Blackberry Leaf Miner.

(*Metallus rubi*, gen. et sp. nov.)

Order Hymenoptera. Family Tenthredinidæ.

(Plate IX. Fig. 7.)

On the 12th August, at Normal, Mr. Garman found mining the leaves of cultivated blackberries, small white larvæ with brown heads, which transformed early in September to small saw flies, one specimen emerging on the 9th and another on the 10th of that month. The transformations occurred in the earth, the larvæ having deserted the leaves as early as September 6.

DESCRIPTION OF GENUS.

Anterior tibiæ with a single spine, other tibiæ with two; antennæ nine-jointed, third joint longer than the fourth, but not twice as long. Head short, about as wide as the thorax; the latter subglobular; anterior wings with two marginal and three submarginal cells, the basal marginal the smaller, the first submarginal curved, longer than the second, the third largest of all; lanceolate cells petiolate.

DESCRIPTION OF SPECIES.

Imago.—Head, thorax, and abdomen shining black, clothed with short yellowish pubescence; antennæ sparingly pubescent, strongly compressed, third joint about five and a half times the length of the fourth, fourth and fifth equal, sixth, seventh, and eighth successively a little shorter, the ninth longer than the eighth; legs pale, all the femora and the posterior tibiæ fuscous; wings smoky, almost black, wing veins black, but slightly tinged with fulvous. Length, 3.5 mm. expanse, 8.5 mm.

Described from two specimens bred from blackberry leaves.

Larva.—The larva is 8.5 mm. in length by 1.25 mm. in breadth, cylindrical, skin minutely roughened. The second and third thoracic segments and the first abdominal are much thickened vertically, giving a convex dorsal outline to this region. From the second thoracic segment the outline slopes rapidly downward to the front, the head being wedge shaped, viewed laterally, and only about half the depth of the second segment. The head is flat beneath, slightly rounded above, about two-thirds as wide as the thorax; antennæ and mouth parts very short; eyes wanting. The color is brown both above and beneath. First thoracic segment trapezoidal, viewed laterally; a large brown chitinous prosternal area extending forward to the mouth parts and laterally to the legs; a brown patch upon the dorsum of this segment. Small brown chitinous sternal areas to the two succeeding thoracic segments, and a still smaller one on the first abdominal.

Legs very short, not longer than their respective segments; prolegs fourteen in number, (counting the two anals), having the form of low, flattened tubercles, each with a brown chitinous patch upon the outer part. The pair of anal prolegs are nearly encircled by two dark brown chitinous arcs.

Segments of the body deeply separated; sides with two lateral rows of obscure tubercles; spiracles brown, minute, except the first on the middle of the first thoracic segment, which is larger and is surrounded by a small brown chitinous patch.

Described from a single specimen taken from the blackberry leaf.

2. *Lophoderus velutinanus*, Walk.

From leaf rollers of the blackberry, collected at Normal, June 30, specimens of this species were obtained July 10 to 18. The food plants heretofore recorded for it are oak, balsam fir, and maple.

3. *Pyrrhia umbra*, Hübn.

Order LEPIDOPTERA, Family NOCTUIDÆ.

(Plate X. Fig. 1.)

Late in May and early in June we found repeatedly, feeding upon leaves of blackberry at Normal, large whitish larvæ, with a lemon-yellow band upon the sides, and numerous conspicuous small black tubercles upon each segment. Numbers of specimens were bred, resulting in orange-brown moths of the above species.

LITERATURE.

This species, common to this country and to Europe, has been repeatedly noticed in American entomological publications, most of the references to it, however, being of a purely technical sort. Under the name of *Heliothis exprimens*, it is mentioned by Grote and Robinson in their descriptions of American Lepidoptera,* with some remarks on its distribution and synonomy.

In 1873, the authors catalogued it as *Chariclea exprimens*.†

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* Transactions American Entomological Society, Vol. III, p. 180.

† Transactions American Entomological Society, Vol. IV, page 432.

In the Seventh Report of the State Entomologist of Illinois, that for 1878, the occurrence of the species at Carbondale is noted by Prof. French, brief descriptions of larva and imago are given, and mention is made of its injuries to the rose.

A description of a larva of an allied species, *Pyrrhia angulata*, (according to some authors identical with this), was given by Mr. Coquillet in the first volume of Papilio (1881). In Volume X of the Transactions of the American Entomological Society (1883), Mr. J. B. Smith figures the fore wing of both these species, (considering *angulata* a variety of *umbra*), and quotes Mr. Coquillet's description of the larva of the former. By Smith the species is placed under the genus Chariclea. On page 259 of the same volume, Mr. A. R. Grote objects to this generic assignment and insists upon Pyrrhia as the proper generic name for the species, not considering Chariclea a homogeneous group, as defined by its author. He also insists upon the specific distinctness of *angulata*. In the third volume of Papilio, pages 135-36, Messrs. Edwards and Elliot give descriptions of the full-grown larva and pupa of this species under the name of *Pyrrhia exprimens*, and mention *Desmodium* as a food plant.

DESCRIPTION.

Larva.—The full-grown larva is 1.36 inches in length, pale bluish white above and greenish beneath, with a bright lemon-yellow stripe along the side, including the stigmata, and above this a pale bluish stripe of about the same width heavily bordered with black above and beneath. The dorsal and sub-dorsal regions are pinkish bluish white, marked with irregular specks and lines having a tendency to arrange themselves in five black stripes most conspicuous on the second and third thoracic segments.

The head is pale chestnut, inclined to orange; cervical shield nearly covered by eight large square black blotches in two rows of four each, the middle blotches of the posterior row being much the largest of all; abdominal segments each with four large conspicuous piliferous black tubercles upon the dorsum, one in front of the spiracle, one just below the edge of the yellow stripe, and another above the base of the proleg. The jointed legs are all black, prolegs shining black without and dusky at the tip. The anal segment is widely bordered with black posteriorly, and a broad black patch extends forward from the middle of this arc. On the two segments preceding this, the dorsal piliferous tubucles are much more conspicuous than elsewhere. Spiracles black.

Pupa.—The pupa is three-fourths of an inch in length, shining, dark brown, the spiracles slightly darker, surface smooth except for some large punctures on the abdominal segments; abdomen terminating in two slender, slightly hooked spines.

Imago.—The front wings and thorax of the imago are brownish orange, varied with yellowish, hind wings pale yellow at base, brownish red on posterior half. Examined with a glass the brown color of the front wings is seen to be irrorate with reddish scales. Transverse anterior line red, zigzag with three angulations; orbicular well marked, of the ground color of the wing ringed with red. Middle transverse line distinct, obtusely angulated opposite the reniform spot, the posterior boundary of which it reaches, thus running obliquely to the posterior margin. At the angle of this line is an obscure reddish shade which invades the reniform spot.

Posterior transverse line broader than the others, oblique, nearly black. Between this and the subterminal line is a purple shade, heaviest inward. The latter line is irregularly scalloped, being dentate on the veins. A slender terminal line; fringes purple whitish at base, costa with two oblique white marks in the vicinity of the transverse line or between that and the subterminal.

Fringe of posterior wings white, slightly tinged with purplish; under surface of both wings pale yellow, with purple shades corresponding to those of the upper surface, and a purple spot representing the reniform.

DISTRIBUTION AND LIFE HISTORY.

This species has been reported from Canada to Pennsylvania and Illinois, occurring in the last throughout the whole State. Specimens found upon blackberries, May 28, pupated about June 15 and commenced to emerge on the 5th July, the last of this lot appearing August 21. Another specimen entered the earth July 10, and emerged on the 18th August. With Prof. French of Carbondale, larvæ obtained early in June had all entered the earth on the 19th, and emerged from August 5 to 31. On the other hand, larvæ of *Pyrrhia angulata* (not impossibly identical with this) obtained by Coquillet from smartweed (*Polygonum pennsylvanicum*) September 15, entered the earth on the 27th and disclosed the imagos on the 22d May of the following year, and a few days thereafter. It is consequently possible that this species is two brooded.

INJURIES TO VEGETATION.

The injuries to vegetation noted thus far, are confined to the worthless plants Desmodium and Polygonum, and to the rose and the blackberry. By Prof. French, in Jackson county, the young larvæ, when about half an inch in length, were noticed eating and disfiguring roses, feeding within the flower rather than on the outside, and seeming to prefer the bases of the petals.

At Normal, as already mentioned, the larvæ were found only upon the blackberry, devouring the leaves. The damage was occasionally decidedly serious, in some cases nearly every cane bearing one or more of the larvæ. These were feeding upon the tender leaves near the ends of the stalks, in company with *Oxyptilus delavaricus*.

4. THE RASPBERRY PLUME MOTH.

(*Oxyptilus. delavaricus*, Zeller.)

Order LEPIDOPTERA. Family PTEROPHORIDÆ.

(Plate X. Fig. 2.)

Late in May we found occasionally at Normal, feeding upon the leaves of the blackberry, a very peculiar, small green larva, having a general resemblance to the raspberry slug, (*Selandria rubi*), but belonging to the Lepidoptera. This larva, new to us when first observed, was determined by breeding to be that of the plume moth, *Oxyptilus delavaricus*, of the family Pterophoridæ.

This insect has already been noticed in Saunders' Insects Injurious to Fruits (pp. 314 and 315), where figures of the larva and imago are given, and all these stages are briefly described, but the species is not there identified. For the determination of the specimens bred by me I am indebted to Prof. Fernald, of Orono, Maine.

The larva, when full grown, is about .4 of an inch long, of a pale green color, sometimes slightly streaked with pale yellow; with a single transverse row of six large tubercles to each segment, each tubercle bearing a spreading cluster of stiff spines which are slightly emarginate at their tips. The dorsal rows of tubercles are larger than those upon the sides, and the spines upon the former (six or eight in number) are likewise the longest of all. Scattered spines also occur elsewhere on the body.

The prolegs of this larva are of very unusual form. They arise from thick wart-like bases, and extend downward a distance equal to two-thirds the depth of the body, as smooth, straight, slender, tapering appendages, which expand suddenly at their tips. The posterior pair of these prolegs, however, thicker than the others, are beset with spines.

The tarsal joints of the articulated legs are similarly slender, tapering, and elongate, and each terminates with a movable claw capable of shutting back against the tip of the extremity.

The head is yellowish, smooth, with a few long bristles in front, mouth parts dusky, thoracic legs nearly black, the abdominal prolegs pale at base, but rapidly darkening and becoming black on the distal half.

The pupa is green when fresh, angular, margined on each side with a whitish ridge, and with a double row of clusters of stout branched spines along the back. The abdomen is slender and acute; the wing pads extend three-fourths the length of the body, the head and thorax being decurved so as to give the front of the pupa an obliquely truncate outline. The back of the thorax is beset with rather slender simple spines; wing pads and under surface of the body smooth except for a thick transverse tuft of hairs upon the middle of the under side of the abdomen, a short distance behind the tip of the wing pads.

Length 8 mm.

General color of the imago, chocolate brown; antennæ black, specked with white internally; thorax brown, with a white collar and a curious metallic purple reflection. The abdomen is brown, white at the base, and variously white-specked above, almost wholly white beneath.

The fore wings are of the general color, minutely specked with bluish white, especially along the costa, and crossed by two transverse white bands beyond the origin of the fissure, the inner of which is the wider, although both are frequently reduced to narrow lines, or occasionally obsolete. The fringe of each lobe of this wing is black, with a large cream-colored patch at the apex, except that that of the posterior lobe is white on the proximal half. The slender posterior lobe of the hind wing is brown at the base, white in the middle, and black on the terminal third, except for a cream-colored patch upon the fringe of the apex. The markings beneath repeat substantially those of the upper surface.

Specimens obtained May 28, pupated on the leaves from June 2 to 11. They commenced to emerge on the 13th, and had completed their transformations by the 18th of that month.

ARTICLE IV. ON THE SPECKLED CUTWORM AS A CABBAGE WORM.

(*Agrotis c-nigrum L.*)

Order LEPIDOPTERA. Family NOCTUIDÆ.

(Plate X. Fig. 3.)

Several times during the last three years, my attention has been called to a large brownish gray caterpillar, marked with oblique black dashes upon the posterior part of the back, found in June and July boring the heads of early cabbage. The character of the injury inflicted was much more serious than that done by the common cabbage worm, (*Pieris rapæ*), not only because of the larger size of the caterpillars but especially because of their habit of immediately penetrating the head and mining in all directions, a single larva thus destroying the head more completely and in less time than would scores of the ordinary cabbage worm. This caterpillar was by us determined as the larva of *Agrotis c-nigrum*, a common noctuid moth, a determination verified later, several times, by breeding.

This is one of the common cutworms, feeding habitually upon grass and upon a great variety of vegetables, but whose injuries to cabbages have been hitherto unnoticed by economic entomologists, as far as I am aware, except those done to the young plants by a brood of the larvæ preceding that which attacks the full-grown cabbage. Our observations on the injury noted have been confined to the vicinity of Normal, with the exception of a single report from Dr. E. R. Boardman, of Stark county, accompanied by specimens of the cutworms which he found eating holes in the heads of his cabbages and causing them to rot. He reported them in July of the present year as quite common on his heads of cabbage and on those of his neighbors.

DESCRIPTION.

The typical full-grown larva has the following characters:

It is 1.2 inches in length by 0.2 inch in width at the widest part of the body, and is much narrowed anteriorly, the first segment being less than half the width of those at the middle of the body. Posteriorly, the diameter hardly lessens, so that the body is obliquely truncate behind.

The general color varies from greenish to fawn, freshly moulted specimens being bright green. In a mature specimen the fawn color is plainly mottled with black and white. There is a delicate obscure dorsal line of white, more or less evidently bordered by a darker shade, deepest upon the incisions, producing an appearance of obscure black points. From these points oblique lines pass forward and outward across the dorsal space to the subdorsal line, these lines being paler than the ground color and bordered anteriorly with black. These black dashes become more conspicuous on the posterior segments than the accompanying pale lines, and are there converted into oblique triangular blotches. In some examples these blotches are evident the whole length of the body.

The subdorsal space is more densely varied with black than the dorsal, giving the sides a darker tint, but the ground color is the same. The lower part of the subdorsal space is more distinctly gray than the upper. A narrowish white stigmatal line margins the sub-stigmatic space above; this latter being a reddish drab, variegated with whitish.

The venter and prolegs are slightly paler and reddish. The head is reddish brown, with two pale brown longitudinal lines. The stigmata are white, ringed with black. The cervical shield is inconspicuous and colored like the body. The piliferous tubercles are small, and the hairs short. In some specimens the lower border of the subdorsal space is marked by a row of longitudinal black dashes. The subdorsal space itself is decidedly darker, and the sub-stigmatic space is a yellowish tint.

The pupa is seven-eighths inch long by two-eighths inch in greatest diameter, reddish brown, fore part opaque, segments of abdomen roughened at articulations, otherwise smooth and shining. Abdomen terminating in two slender spines, with two minute spinules at their bases, one on each side.

LIFE HISTORY.

Our data indicate at least two broods of the species, and there is possibly a later one also. The larvæ have appeared in our collections from April 24 to May 6, and again in the middle of July. Those taken in April pupated from the 26th of that month to the 6th May, the imagos emerging from the 10th May to the 21st, a single belated specimen appearing on the 11th June. Specimens pupating on the 26th emerged five days later. Larvæ taken from cabbage on the 16th July entered the ground on the 25th, and emerged from the 15th to the 19th August. As the larvæ obtained in April were adult, the species evidently hibernates in the larval stage. From the specimens in our breeding cages emerged two hymenopterous parasites of the sub-family Cryptides, but which I have not further determined.

ARTICLE V. NOTES ON INSECTS INJURIOUS TO THE APPLE AND PEAR.

1. *Datana contracta*, Walker.

Order Lepidoptera. Family Bombycidæ.

From a number of yellow-necked apple caterpillars collected on apple trees August 13, 1883, and used in an experiment upon a contagious disease of insects, two pupæ resulted, one of which emerged. This, to my surprise, proved to be an unquestioned *Datana contracta*, agreeing in every essential particular with the description and figures given by Grote and Robinson in Volume VI of the Proceedings of the Entomological Society of Philadelphia.*

The discal spot upon the first brown line of the anterior wing is not evident, however; the first and second lines meet on the inner margin of the wing; and the fourth line is nearly obsolete. In other respects the correspondence is exact. The larva pupated September 14, 1883, and the moth emerged June 23, 1884.

2. *Biston ypsilon*, n. s.

Order Lepidoptera. Family Phalænidæ.

(Plate X. Fig. 4.)

A single looping larva, two inches long, was obtained from the apple near Warsaw, June 26, 1883, and fed upon apple leaves until July 7, when it entered the earth for pupation. Here it remained until April of the following year, on the 8th of which month the living moth was noted in the breeding cage.

Imago.—The single male specimen bred is of a brownish gray color; head dusky gray; palpi black; antennæ dusky, widely pectinate; thorax gray, with three transverse dark lines, the anterior and middle arcuate, the posterior straight. The front wings are brownish gray specked with black on basal and terminal thirds, marked with three transverse black lines with the space between the first and third pale gray minutely specked with black, these specks taking the form of transverse lineations on the costa. The inner line is obliquely arcuate, its inner end being about half the distance of the outer from the base of the wing. The third line is sinuate, bending broadly forward around the end of the discal cell and then running nearly

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* Page 14, and Plate II, Figures 5 and 6.

directly to the internal margin. The middle line is straight, and joins the inner end of the third before it reaches the internal margin. About one-half the distance from the third transverse line to the posterior margin is a jagged, pale, transverse line extending across the wing. The posterior wings are pale gray, marked with two transverse lines, the inner of which is straight and the outer sinuous like that of the fore wing. Beyond this is an obscure subterminal whitish band. Upon the middle of the wing, between these lines, is a distinct black spct. The wing beyond the outer transverse line is more irrorate with dusky, the fringe pale with blackened scales in the intervals between the veins. The first segment of the abdomen is covered with long gray pile; the remaining segments are fulvous brown, with a double row of black blotches along the middle.

Larva.—Length, when full grown, two inches. The general color is a reddish drab, ornamented with numerous irregular longitudinal stripes of a reddish hue, varied with yellow and bordered with jagged lines of black. Four of these bands are continuous upon the back, but vary greatly in width. On the sides they are much interrupted, the stripe below the spiracles being broken up into irregular patches. That immediately above the spiracles is regularly interrupted, disappearing at the middle of each segment. On the last two segments all the bands are much interrupted and very irregular. The dorsal stripes are confluent a little behind the middle of each segment, from the fourth to the eighth, with the exception of a central stripe of the ground color, by which all the transverse bands are broken. These confluent band-like areas of the longitudinal stripes are, at first, yellow, but all change to russet with the last moult, except the anterior one, which remains a bright lemon-yellow. The surface is smooth with the exception of a transverse row of about five black hairs to each segment, each arising from a minute tubercle. There is also a prominent tubercle behind each spiracle (excepting that upon the first segment), bearing a black hair at its apex. This row of lateral tubercles is variegated with rose and yellow, and each is surmounted by a jagged black line, which includes the black spiracle in the area described by it. The ventral surface has the same ground color as the dorsal, and is similarly marked with longitudinal stripes, which are, however, less distinct than the above. The head is irregularly punctate, patches of the punctures being black, giving the surface a mottled appearance. The general color of the head and first segment is lighter than that of the other parts of the body. The anterior segment has a yellow front margin, interrupted in the middle by the median stripe already described. The legs are ringed with black and yellow at the articulations, and are elsewhere more or less spotted with black. Upon the antepenultimate segment are two prominent black tubercles, one upon either side of the median stripe, each bearing a stiff bristle at its apex; and similar bristles are scattered over the dorsal surface of the succeeding segments. The last segment with the corresponding prolegs is punctate with black, and bears two smaller setose tubercles similar to those above mentioned. The preceding pair of prolegs are irregularly striped and mottled with black, rose, and yellow, like the sides. Some transverse rows of minute black hairs are visible upon the under surface, two or three to each segment.

3. THE APPLE LEAF ROLLER.

(*Cacœcia rosaceana*, Harris.)

Order LEPIDOPTERA. Family TORTRICIDÆ.

The larva of this insect, well known to be injurious to the apple from its habit of rolling and eating the younger leaves, was observed early last May engaged in a much more mischievous attack, eating the stamens and pistils out of the freshly opened flowers. As the flowers disappeared, these larvæ resorted to the young leaves, according to the usual habit of the species. Specimens collected on the 10th of May, pupated June 9, and emerged as imagos June 16.

4. THE APPLE LEAF SKELETONIZER.

(*Pempelia hammondi*, Riley.

THE LESSER APPLE LEAF ROLLER.

(*Teras malivorana*, LeBaron.)

Order LEPIDOPTERA. Family TORTRICIDÆ.

(Plate X. Fig. 5.)

In nurseries near Normal my attention was called this year, as last, to the extraordinary abundance of the above insects, the effect of whose presence began to declare itself most evidently late in June. Much of the young nursery stock was so seriously affected during this active growing season that its growth was completely arrested; and as these larvæ remained active this year until the leaves fell in autumn, a large percentage of the young trees made no good growth whatever. The varieties with thick and woolly leaves, were, however, little attacked, the moths having evidently selected the smooth and thinner-leaved varieties when depositing their eggs. We made various experimental attempts upon these insects in the field, using a force pump for the distribution of a kerosene emulsion and of pyrethrum suspended in water. We also applied powdered lime with a bellows, but none of these applications had a sufficiently pronounced effect to make their continuance advisable. A small percentage of the worms would die when thoroughly drenched with the fluids, but rolled as they were in the leaves and protected by their webs, it was impossible to reach them with any thoroughness. On one occasion three days after a complete drenching of the trees with the kerosene emulsion, ten still living larvæ were taken from a single small tree about three feet high.

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Against these insects, methods of protection must evidently be the main reliance. If the nurseryman waits until their injuries alarm him, the time for checking their ravages is substantially past. Both these species pupate in the leaves, either upon the tree or upon the ground, and may be destroyed by collecting and burning the rubbish between the rows; or watching for their first appearance early in the season, the foliage may be sprayed with arsenical solutions, or with Paris green or London purple in suspension, thus poisoning the young larvæ as they hatch or the older ones as they extend their webs.

5. *Crepidodera helxines*, L.

Order LEPIDOPTERA. Family CHRYSOMELIDÆ.

The little flea beetle was noticed June 22, riddling the leaves of apple trees near Normal; and the common cucumber flea beetle, *Crepidodera cucumeris*, was also detected at the same work as early as the 10th of May.

6. THE APPLE PLANT LOUSE.

(*Aphis mali*, Fab.)

Order HEMIPTERA. Family APHIDIDÆ.

In his article on this species in the Eighth Report from this office, Dr. Thomas expresses a doubt whether the common apple leaf aphis of Illinois, is the above species or that described by Fitch from Mercer county, Illinois, under the name of *Aphis malifoliæ.** Careful examination of the winged form of all the apple aphides in the collections which we have made during the last two years in Southern and Central Illinois, shows not a single specimen of *malifoliæ*, all being distinctly *mali*.

It is worthy of remark that the second fork of the third vein of the anterior wing is often very small, and sometimes even disappears entirely, so that this vein presents but a single fork,—a character which, taken by itself, would exclude such specimens from the genus Aphis. When present, the fork varies from one-half to one-sixth or one-seventh of the length of the first.

7. THE YELLOW JUMPING PEAR LOUSE.

(*Trioza pyrifoliæ*, n. s.)

Order HEMIPTERA. Family PSYLLIDÆ.

(Plate X. Fig. 6.)

The injuries to the pear done by the common jumping pear louse (*Psylla pyri*) are well known to economic entomologists, and have

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been characterized in a brief article upon this insect published by Dr. Thomas in our Eighth Entomological Report. I have here to record the occurrence in Illinois of a second species of this family, similar in habit, (and apparently in life history also), to its well-known relative.

This is a small yellowish species which we found at Normal on the 7th of May, and occasionally thereafter, puncturing the blades and the petioles of the leaves of the pear trees. It presents all the characters of the genus Trioza, having, however, the frontal lobes greatly inclined (projecting downward decidedly more than forward) so as to present the aspect of a beak.

It averages .1 inch in length. The surface is opaque, thorax brownish yellow, abdomen blackish brown. The head is twice as wide as long across the eyes, nearly as wide as the thorax; the vertex very widely emarginate in front, the foveæ opaque but not rugose, very large, occupying nearly the whole of the upper surface. The vertex is usually black, edged with yellow posteriorly, but the black is sometimes reduced to a transverse blotch surrounded by yellow, or even to two black spots occupying the centers of the foveæ. The face is black, frontal lobes diverging somewhat, hairy, with the longer hairs varying in color from white with black tips to wholly black. The antennæ are as long as the head and thorax, the two basal joints and the basal half of the third white sometimes shaded with dusky. The third joint is four-fifths as long as the fourth and fifth together. The last two joints are thickened, closely united, forming a slight club, and the last bears a minute cylindrical appendage at its inferior tip and a short hair above.

Pronotum narrow, white in the middle, brown or black on the sides, with a white point upon the lower edge. The dorsulum opaque, naked, a little longer than the mesonotum, closely and minutely punctured, brownish yellow, often clouded with dusky, most distinctly seen in front, where brownish blotches sometimes appear, one upon either side of the middle. The sutures are all black, posterior margins straight in the middle; the sides, a little distance in front of the suture, bearing each a short black spine.

The mesonotum and scutellum are brownish yellow, alutaceous like the dorsulum, with a conspicuous lanceolate or oval longitudinal brown stripe or blotch on each side the middle, and an oblique blotch outside this, usually less evident than the preceding. Scutellum vaulted, plain in all the specimens examined. Wings hyaline, nerves brownish yellow.

The legs of the first and second pairs are sometimes wholly dusky, except the tarsi, which are black, but the femora are sometimes dusky only above, and the tibiæ only in front. The hind femora are commonly dusky above, but the tibiæ and the basal joint of the tarsus pale. Abdomen purplish brown with pale posterior edges to the segments; conspicuously hairy at tip.

Described from ten specimens.

Another species of Trioza, (*T. diospyri*), first described by Ashmead from the persimmon in Florida, and found by us abundant on that tree in Southern Illinois, was likewise occasionally seen at

Normal on the pear. As the persimmon is unknown in this vicinity, the species doubtless occurs on other trees. We have not found it, however, upon cultivated fruits in numbers to indicate any probability of injury to them.

This species is larger than that just described, shining black, more or less pubescent, especially upon the head and thorax. The frontal lobes are short, very obtuse and project forward from the vertex.

It is probable that *Trioza pyrifoliæ*, like *Psylla pyri*, winters as an adult and lays its eggs upon the young leaves in spring. The young of the common species fix themselves habitually upon the young twigs or wood of the previous year, and, piercing the still soft bark with their long beaks, remain stationary except when disturbed. The fluid excrement of the louse attracts ants and other syrup-loving insects, as does that of the Aphis. As the larvæ obtain their growth, they spread to the under sides of the leaves. Where these insects are abundant, the continual drain upon the sap of the young twigs arrests their growth, and the tips of the leaves and twigs may die.

The various insecticides found available for plant lice take effect likewise upon these jumping leaf lice, the most promising topical application doubtless being the kerosene emulsion with soap.

8. THE WILLOW SAW FLIES.

(*Dolerus arvensis*, Say; *Dolerus bicolor*, Beauv.)

Order HYMENOPTERA. Family TENTHREDINIDÆ.

(Plate X. Fig. 7.)

From one of the most intelligent and observant fruit growers of my acquaintance, I have heard from time to time of a "steel-blue fly" which clustered in spring upon the buds and blossoms of the pear, either eating them or blighting them and causing them to drop. On the 30th March he sent me specimens from his pear trees, and I found them to be the adults of the above two species which are known as willow saw flies,—so-called because their green, many-footed larvæ feed on the leaves of willows. The evidence against these saw flies lay in the fact that they were abundant and busy upon the opening buds and fresh blossoms of the pear and of some other trees, for many days in succession, and that the blossoms afterwards fell without setting fruit. Afterwards a similar but more positive charge against these insects appeared in the correspondence of the "Western Rural" of Chicago, for May 17, 1884, as follows:

"Enclosed you will find a couple of bugs that are working on fruit trees here. They ruin many blossom buds by sucking the sap out of them, sometimes causing them to fall off just before opening. They make their appearance as soon as the trees begin to grow.

You will notice there are two colors of bugs—red and black. Is there any way to get rid of them? Poison won't do it, for I have tried London purple. They suck the sap mostly, although I think later in the season they eat the leaves some, but am not sure of it. They work on pear worse than others."

The first of these species, *Dolerus arvensis*, was originally described by Thomas Say in 1824, and the second, less common but still abundant, by Beauvois, in 1805. Although the larvæ of the former, at least, have been known for a long time to feed upon the leaves of willow, they have not otherwise, so far as I am aware, been suspected of any injury to vegetation of economic importance, all the references to them in the literature of entomology being of a strictly technical character. From other insects occurring in similar situations, with which they are at all likely to be confounded, they may be distinguished by the following characters in addition to those of the family Tenthredinidæ, to which these insects belong:

The first, *Dolerus arvensis*, is a little more than one-third of an inch in length by about one-third as wide, and measures not far from two-thirds of an inch across the extended wings. The head and body are dark steel blue except the thorax, which is variegated with yellow and black.

The other species, *Dolerus bicolor*, is a trifle smaller than the first, brownish yellow except the wings, the head, the middle of the thorax, and the legs, all of which are black.

Both these insects are abundant everywhere in early spring, and the larvæ of both, similar in appearance to green caterpillars, but distinguished by the possession of eleven pairs of legs, feed upon the leaves of the willow a little later in the season.

Careful watching in the field soon convinced me that these saw flies were neither biting nor piercing the buds or flowers, but that they were merely licking off the semi-fluid exudation from the surface of the bud scales. Dissecting the specimens and examining the contents of their stomachs with the microscope, I found only a clear fluid, without a trace of solid matter except occasional spheres consisting of clusters of threads of fungous parasites. Critically searching the surface of a bud scale which these flies had but just worked over, I saw that no injury whatever had been done to the tissues of the plant, even the slender hairs with which the scales were covered being wholly undisturbed. Watching the flies with a glass, I could see that their biting jaws remained all the time closed, but that their flap-like maxillæ were continually employed in mopping up the moisture from the viscid surface, and as they have no mouth parts capable of piercing the substance of a plant, it was clear that no injury was being done. Finally, I confined a lot of the saw flies in a breeding cage with pear buds not yet open. The insects industriously worked over the surfaces of the unopened buds and even entered the flowers as they expanded, but did neither any visible injury whatever. The buds afterwards all opened out in abundant bloom, and remained fresh for several days, while the poor saw flies, having lapped up all the syrup available, starved to death in the midst of the uninjured blossoms. A little experiment showed that they were especially susceptible to the influence of pyrethrum, and that a single thorough application to a tree would kill all upon it at the time.

The above brief account of these insects is given merely to set at rest the fears of those who, like my correspondents, may be led to attribute to them serious mischief really due to quite other causes.

ARTICLE VI.—ON SOME INSECT ENEMIES OF THE SOFT MAPLE (*ACER DASYCARPUM*).

1. Notes and Experiments on the Soft Maple Bark Louse.

(*Pulvinaria innumerabilis, Rathvon.*)

Order Hemiptera. Family Coccidæ.

(Plate XI. Figs. 1 and 2.)

This annoying and even destructive species, which attracted so general attention four years ago and then suddenly disappeared from view, commenced, last year, to appear again in noticeable numbers on the soft maples throughout Central Illinois, and during the season just passed was excessively abundant throughout the State from at least as far south as Shelbyville to our northern limits. Notwithstanding the length at which it has been treated in former reports from this office, and the numerous articles upon it which have appeared in the agricultural and political papers during the last few years, great numbers of my correspondents were unacquainted with the name and life history of the species. In fact, fully half the entomological correspondence of this office during the months of June and July related to this bark louse. In the earlier articles upon it in the Report, some premature conclusions were reached with respect to its life history, and I do not know that exact experiment has heretofore been made with respect to its destruction.

The females of the preceding year which had wintered upon the twigs of the maples, began to attract general attention early in June, they having by this time attained their full growth and developed the cottony egg masses beneath the scales into which their bodies had become practically converted. By the middle of June it was easy to see that the lice were abundant almost everywhere upon the maple, and they commenced to appear likewise upon a number of other trees and plants. On the 14th, we noticed them upon the pear and box elder at Normal, and on the 16th, upon the grape and walnut at Quincy, and upon the pawpaw, grape, and honey locust, at Normal.

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As the young hatched, they spread in great numbers over the vegetation in the vicinity of the trees where they had their origin, and attached themselves to a great variety of plants, both shrubby and herbaceous, besides those mentioned above. We found them upon the bass-wood, green ash, American elm, black locust, osage orange, plum, and cherry, and in their second stage upon leaves of clover and smartweed, upon wild cucumber, and upon the gooseberry. In fact, their young occurred, in the middle of July, upon nearly all the herbaceous plants within one or two hundred feet of infected trees; clover, plantain, Polygonum, mustard, various grasses, and *Bidens frondosa,* being the species apparently preferred. The latter plant seemed to suffer considerably from their attacks, the leaves being paled, spotted with yellow, and slightly curled when worst infested. By the latter part of July the larvæ in the second stage were common upon the under sides of the leaves of strawberries near infested trees, causing them to contract and curl.

The ultimate fate of these individuals which fixed themselves upon herbaceous plants and throve there, for a time at least, we neglected to make out, but it is probable that the greater part of them perished in autumn, although some may have succeeded in migrating at this period (when the young upon the trees are passing from the leaves to the twigs) to woody plants on which they could maintain themselves until the following season. The fact that in nurseries we sometimes found the young very abundant upon the suckers at the bases of the trunks of trees which were themselves but little infested, tended to confirm this supposition.

I noticed a marked difference in the stage of advancement of the brood upon different trees, some retaining still a considerable percentage of the eggs unhatched in the cottony masses attached to the twigs; after others had practically yielded all their young, and the obsolete bodies of the females and the egg masses had fallen to the ground, or were hanging in ragged shreds from the branches of the trees. As late as July 13, on some trees in Bloomington, fully twenty-five per cent. of the eggs were still unhatched. By the 20th of the month the young had nearly all left the nests of the mother bark lice and were established on the leaves, although a few eggs could occasionally be found which were still unhatched.

By the 16th August the injury effected by this new brood was at its height, and many trees in the vicinity of Bloomington lost a considerable part of their leaves, and the others were blackened and dwarfed, giving the branches a bare and unthrifty look.

By the 30th October all the living bark lice had deserted the leaves, except a few found occasionally upon the petioles, but thousands of them occurred upon the under sides of the twigs and branches of nearly every tree of the species worst infested, (*Acer dasycarpum*), the twigs being often crowded to their very tips.

The common insect enemies of the species were moderately abundant throughout the season, the small black Coccinellid beetle, *Hyperaspis signata,* whose larva is found embedded within the egg mass devouring the eggs, being the most destructive.

The minute hymenopterous parasite described by Miss Emily A. Smith under the name of *Coccophagus lecanii** was not infrequent. Numerous specimens emerged in our breeding cages early in October, at which time also the adult Hyperaspis appeared abundantly. Only an insignificant percentage of the brood was actually parasitized, however, and the number of these parasites occurring was far below those of the year 1880, at which time the last previous uprising of this species culminated. There is consequently every probability that the maple bark louse will be certainly not less abundant next year than this, but probably far more so, and that the year following will be marked by their almost total disappearance.

An interesting observation of my first assistant, Mr. H. Garman, is here inserted from his notes dated July 24.

"A nest of the goldfinch, *Chrysomitris tristis*, was found to-day in an osage orange hedge, and on examination proved to be covered outside with the silken nests and bodies of the female of *Pulvinaria innumerabilis*. These had been collected some distance away, as there were no maple trees in the neighborhood. There were no bark lice on the leaves of the hedge at a distance from the nest, but in the neighborhood of the latter the leaves were covered with them, some still active. The fact illustrates a means of dispersal for this bark louse which does not seem to have been noted by writers."

EXPERIMENTS.

For the purpose of testing precisely the value of various local applications to trees infested by the maple bark louse, I instituted a series of experiments with all the substances likely to be of economic use, and the results are herewith given.

Kerosene Emulsion.

On the 18th July, when the leaves of the trees were generally infested by the young, we began experiments with the kerosene emulsion, using a strong soap suds for the preparation of the emulsion, and diluting with water to give two and a half per cent. of kerosene.

Experiment 1.—At three p. m., a single leaf bearing many young lice was dipped in this fluid for a moment, and two hours later a number of the insects were taken from the leaf and examined with a microscope. All were evidently dead, and those on the leaf also commenced to loosen at the margins and curl upwards. At eight on the following morning a single example only was found capable of slight motion.

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*American Naturalist, Vol. XII, p. 661. J. Duncan Putnam in his admirable article on *Pulvinaria innumerabilis* published in Volume II of the Proceedings of the Davenport Academy of Sciences remarks, in a foot note to page 332, concerning this species: "I am very much inclined to think that *Platygaster lecanii*; described by Fitch in his 5th New York Report, as infesting *Lecanium quercitronis* may prove to be really a Coccophagus nearly allied if not identical with this species. The description applies too well, to easily believe that the two species belong to different families. In this event Dr. Fitch's reference to the Proctotrupidæ is of course wrong."

I am not able, however, to agree with Mr. Putnam in this matter, as the description by Fitch to which he refers states that the antennæ of his species are threadlike, with the joints slender, three times as long as thick, the last one not enlarged; whereas, in the specimens of *Coccophagus lecanii* bred by us from Pulvinaria, the antennæ are somewhat clavate, the joints less than twice as long as thick, and the last one is decidedly enlarged.

Experiment 2.—This was a repetition of the first experiment with identical results except that all the plant lice examined on the morning of the 19th were absolutely dead.

Experiment 3.—In this case the same solution was applied to an infested leaf with a camel's hair brush with the same effects, all the bark lice being dead at eight the following morning.

Experiment 4.—On the 22d of the month a two and a half per cent. dilution of the kerosene emulsion was thrown with a force pump and a tubular nozzle upon a branch of a soft maple tree. The leaves were not as thoroughly wetted as desirable. Four days after about half the young bark lice were alive, although it is possible that the branch treated had been restocked by young from other parts of the tree, as the insects were still moving about and no precaution had been taken to prevent such migration.

Experiment 5.—On the same day a branch of soft maple attached to the tree was dipped in a two and a half per cent. dilution of kerosene, and on the following day three-fourths of the bark lice were dead. Four days after a few were still alive, but not enough to do any appreciable harm, and another application would doubtless have killed them all.

Experiment 6.—On the 29th the same experiment was tried with a five per cent. dilution of kerosene, the emulsion being made with whale oil soap, and common soap suds being used for dilution. Two days later the bark lice remaining on the leaves of this branch were all dead.

Experiment 7.—On the 29th, on the other hand, an application was made to a branch by dipping in a two and a half per cent. dilution, soap suds being again used as the diluent, and five days thereafter no considerable diminution in the number of living bark lice was apparent. It seems likely, however, considering the length of time that had elapsed between the experiment and the observation, that the branch had been restocked by young from other parts of the tree, as the lice were still actively crawling about.

Experiment 8.—On the 31st of the month the leaves of a branch of soft maple which was stocked with young bark lice were dipped in a five per cent. dilution of kerosene emulsion like that used in the preceding experiment. Five days later a few living bark lice still occurred upon the leaves, but nearly all had disappeared.

Experiment 9.—On the 6th August a similar experiment was made with a similar fluid, but containing ten per cent. of kerosene. The branch treated was not examined until nine days afterwards. The leaves were not at all injured by a solution of this strength. Many bark lice still remained upon them, but they had perhaps been restocked with living young.

In all the preceding observations the effect upon this bark lice was determined by microscopic examination, the sign of death relied upon being the cessation of the heart's action. As the young were transparent when viewed by transmitted light, the motion of the heart of living specimens was easily detected.

Whale Oil Soap.

From the 19th to the 22d several experiments were tried by dipping the leaves in a solution of whale oil soap, or brushing their surfaces with it, but as the strength of the solution was not noted in these preliminary trials, I need only say that they were in all cases effectual.

Experiment 10.—On the 23d a branch of a tree infested with bark lice was dipped in a suds of whale oil soap containing a pound to a gallon of water, and on the morning of the following day the lice were all dead. Two days later, however, the leaves dipped in this solution showed signs of injury, the margins of most of them having blackened and dried up. Naturally the younger leaves at the tip of the branch were most severely injured, some having been almost wholly destroyed. On the 29th, nearly all the leaves had fallen off this branch.

Experiment 11.—On the 25th July, leaves were dipped in a solution containing a quarter of a pound of whale oil soap to the gallon, and on the 26th the bark lice were mostly dead, only a small percentage showing a feeble movement of the heart.

Experiment 12.—The above experiment was varied by using a solution double the strength just mentioned. On the following day all the specimens examined were dead.

Experiment 13.—On the 28th, experiment 12 was repeated with identical results, all the bark lice being dead two days later.

Experiment 14.—This was a repetition of experiment 11. The twigs were not examined, however, until five days afterwards. At this time, at least seventy-five per cent. of the bark lice upon the leaves were dead and many which were not killed seemed to have been driven from the leaves as if the soap suds were obnoxious to them. This was shown by their having fixed themselves upon the petioles and twigs, a fact not elsewhere observed so early in the season. The leaves were again very slightly injured at their margins, and a few, perhaps, eventually fell before their time.

Experiment 15.—A repetition of experiment 12. Five days after treatment not a single living bark louse could be found upon a leaf containing a hundred or so, all being brown and loosened, so that a touch dislodged them. The leaves, however, were slightly blackened at the margins, and some were doubtless injured enough to cause them to fall.

The experiments with whale oil soap were, consequently, less satisfactory than those with the kerosene emulsion, an application of the suds, strong enough to effect the purpose, being very likely to injure the leaves at least as much as the bark lice would have done.

Laundry Soap.

Experiment 16.—Three applications of strong solutions of laundry soap were made with a brush to infested leaves, from the 19th to the 22d July, with the effect to destroy all the bark lice, occasionally, however, with trifling damage to the leaves. The effect of these applications apparently differed but little from those of the whale oil soap.

Pyrethrum.

Experiment 17.—Although expecting nothing from the application of pyrethrum, we made a few experiments with it, commencing July 19. As they were all entirely inefficient, the results need not be given further than to say that the fresh pyrethrum powder suspended in water in quantities varying from a tablespoonful to the gallon up to an excessive proportion was applied by brushing and dipping, without any effect whatever. Pure pyrethrum was also dusted upon the leaves without result.

Carbolic Acid.

Experiment 18.—July 19, leaves infested with the young bark lice were thoroughly wetted with carbolized water (a teaspoonful of the pure liquid acid to the gallon) and examined five hours later. The bark lice were all alive. This experiment was twice repeated, both in the laboratory and the field, with only negative results.

A few additional experiments were made with tobacco water (one-half pound tobacco to a gallon of water); with hellebore (one ounce to the gallon); and with a weak solution of caustic soda,—in all cases without any favorable result, every individual being apparently alive in from one to three days after treatment.

As a general result of the above series of experiments we may say that a kerosene emulsion diluted with soap suds to a strength of from two and a half to five per cent., was found effective during the month of July and did not injure the leaves. This was the only substance experimented with which gave any promise of usefulness, with the exception of the whale oil and soaps, which were subject to the drawback already mentioned; that is the liability to injure the leaves if used in a solution strong enough to destroy the bark lice. Possibly if it were washed off shortly after application, as recommended by Dr. Lintner, the injurious result might be prevented, but this would too greatly increase the trouble and expense of the application.

Washing off the Females and Egg Masses with Water.

From correspondents in Northern Illinois, I learned that late in June, the practice became somewhat general of washing off the egg masses and the outworn bodies of the females with jets of water from the hydrants, throwing the water into the tree by means of a hose, but I have not yet been able to learn with what result. This method was, apparently, usually applied under the mistaken notion that the principal injury to the trees was done by these last year's females, and that if they were removed the damage would be arrested. The real injery, I need not say, is done later in the season by the young hatching from the egg masses which make these females so conspicuous in spring and early summer. It is possible, however, that the method is a valuable one, as the washing away of the eggs before hatching, may not improbably result in the destruction of many of them. The young which hatch upon the ground would doubtless, most of them, make their way back to the tree, but if the rubbish beneath the tree were raked and burned after the egg masses had been dislodged by the water, the multiplication of the pest might probably be kept below the limit of injury.

[Since the above was written, I have received from Mr. S. M. Dunning, of Chicago, who thoroughly tried the hydrant method last June, twigs of a maple tree from which the egg masses had been carefully and completely washed off. The under sides of these twigs were well covered, in March, 1885, with half grown females,—scarcely, if at all, less abundantly so than was to have been expected if no treatment had been applied. The nearest other maples were across a dusty city street, and it is scarcely likely that the young were conveyed so far. A box elder in the same lot, which was also attacked by the bark lice, but not treated, may have divided its parasites with the maple; but, curiously, this tree had this spring fewer lice than the maple above mentioned. It is, therefore, improbable that the mere dislodgement of the egg masses with the water jet had any real effect on the numbers of the young lice. Indeed, it may have easily done more harm than good by destroying within the egg masses the larvæ of the Coccinellidæ to whose multiplication we have to look for the principal check on the increase of the next brood. This is, perhaps, the explanation of the inferior abundance of bark lice upon the box elder, as just mentioned. Destruction of the egg masses by burning, after dislodging them with water, seems to be necessary to any promise of success by this method. Further experiment is needed, however, and will be undertaken the coming season.]

2. THE OBLIQUE-BANDED LEAF ROLLER.

(*Cacœcia rosaceana*, Harris.)

This nearly omnivorous species, (not hitherto reported, however, from the maple), was by us found rolling the leaves of *Acer dasycarpum* in May, pupæ and larvæ collected on the 20th of that month emerging from July 9 to 13.

3. *Pandemis lamprosana*, Robs.

Order LEPIDOPTERA. Family TORTRICIDÆ.

(Plate XI. Fig. 3.)

Among the leaf rollers upon the maple, collected May 10, was one of which we kept no description, which resulted in an imago of *Pandemis lamprosana*.

4. *Aleurodes aceris,* n. s.

Order HEMIPTERA. Family ALEURODIDÆ.

(Plate XI, Figs. 4 and 5.)

I have noticed, for several years, a peculiar bark louse upon the leaves of the maple, but have not bred it until the present year. The fully developed pupal scale is oval in general outline, somewhat lyrate, broadest posteriorly, contracted in front of the middle. Margins entire, surface densely granulated. The color is chocolate, mottled with white, the white varying in amount and tending to form three transverse bands. The central segmented area is usually irregularly mottled with white, and a quadrate patch, including the vent, is almost always brown; but, otherwise, the color may vary from nearly uniform brown to almost white. Outline sometimes slightly emarginate posteriorly. Length, .095 of an inch; greatest width, .045; width at anterior fourth, .036.

The imago is pale yellow throughout; legs and abdomen paler; wings milky white; rostrum black at the extreme tip; veins yellowish; first joint of the antennæ scarcely longer than wide, the remaining joints filiform, the second nearly as long as the four following and about four times as long as the first, the fourth longer than the third, the third and fifth about equal, the sixth fusiform.

At Tamaroa, in Southern Illinois, soft maple trees were found badly infested by this bark louse, but elsewhere it has occurred in only trivial numbers. There are apparently two broods of this species in a year, scales collected in August, 1883, emerging April 10 to 24, 1884, and others, collected during the present summer, emerging August 4. From these larvæ several hymenopterous parasites belonging to the genus Elaptus escaped September 6, the species of which is apparently new.

Elaptus aleurodis, n. s. Plate XI. Fig. 6. Female. Length .03 of an that of inch; the head .005 inch; front wings .032 of an inch long and .001 inch wide; posterior wings .0032 inch wide at the widest point; antennæ as long as the head and whole body; scape stout, arcuate, rising to the top of the head, about as long as the three following joints, nearly smooth, as is also the second joint; remaining joints densely pilose; the club not jointed, as long as the three joints preceding; first joint obconic, second about the same length but narrower. Color black, surface shining, abdomen alutaceous, head and thorax punctured, antennæ yellow, legs entirely yellow, femora and tibiæ of the middle and posterior legs black, their tarsi yellow.

Described from three specimens bred from *Aleurodes aceris.*

5. *Lygus invitus,* Say.

Order HEMIPTERA. Family CAPSIDÆ.

(Plate XII. Fig. 1.)

Brief mention may properly here be made of a species whose injuries to vegetation have not hitherto been serious, as far as known, but which deserves attention as the near relative of one of the most injurious horticultural species (the tarnished plant bug), and also because, from its own abundance and habits, it may well become the author of serious mischief.

Although not agreeing precisely with any descriptions of Capsidæ accessible to me, I have little doubt, after careful study of about forty specimens collected in June, that the species is that described by Say as *Capsus invitus*. It differs materially from Say's original descriptions, but corresponds closely in most particulars with the description of a type specimen of Say's, published by Uhler in his notes on the Heteroptera in the collection of Dr. Harris,* varying from that only in some color characters of little moment in so variable a genus.

DESCRIPTION.

The following description is condensed from that of Uhler, modified with respect to color to conform to our own specimens.

General color pale obscure yellow, varying to yellowish green. Antennæ and transverse carina at base of head very slender, the former nearly as long as the hemelytra. Surface of head polished, impunctured, clothed with short hairs. Tylus slender, short. Eyes large, prominent. Pronotum smooth, very convex, sparingly hairy, finely, densely and mostly confluently punctured, the punctures forming obscure transverse rugosities. The head and fore part of the thorax are slightly darker yellow, the antennæ are sometimes pale throughout, sometimes embrowned at tip and also at tip of second joint. A broad band on the pronotum, a little within the margin, extends backwards along the inner edge of the clavus, is continued as a dusky shade through the middle of the membrane, deepest along the inner edge of the inner cell, and extends distally into an indefinite dusky shade. This line is intersected at the tip of the corium by a transverse band of the same color extending to the edge of the hemelytra. When the wings are closed, these marks give the appearance of a median black stripe crossed at the tip of the corium by a black band, and forking at the scutellum. In the darker colored specimens the pronotal bands are frequently connected by a basal shade. The posterior half of the larger cell of the membrane is usually white. In many yellowish specimens the cuneus alone is green. The posterior thighs are commonly infuscate on the distal half, and the anterior tibiæ are often brown at tip. Length to tip of hemelytra 6 mm. Humeral breadth 1.66 mm.

On the 12th May the younger leaves of many of the common soft maples (*Acer dasycarpum*) near Normal, were observed to be curled, and specked with numerous semi-transparent spots, evidently the work of the larvæ of this capsid, found abundantly upon the affected leaves. On the 30th May, specimens collected were all of the second and third stages. On the 1st June, the first imagos were seen in the breeding cages and on the trees. By the 5th of that month nearly all the specimens collected had transformed to the imago, and the experiment was not carried farther.

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* Proceedings of the Boston Society of Natural History, Vol. XIX, p. 407.

ARTICLE VII. INSECTS INJURIOUS TO THE ELM.

1. The Elm Borer, (*Saperda tridentata*, Oliv.)

Order Coleoptera. Family Cerambycidæ.

(Plate XII. Fig 2.)

For several years past my attention has been attracted by the gradual decay and death of the rows of white elms (*Ulmus americana*) in the towns of Normal, Bloomington, and Champaign. The difficulty with the trees commonly commences, to declare itself from the middle of summer to autumn, when the leaves, first upon the terminal twigs and then upon the larger branches, are seen to stop their growth, change their color, and ultimately to fall. This loss is naturally followed speedily by the death of the branches themselves, as is clearly evident the following spring, when these remain black and lifeless while the rest of the tree is putting on its foliage. Usually the higher branches of the tree are those first affected, but the whole top soon seems to blight, and in a year or two the tree perishes utterly. This difficulty, commencing here and there, extends slowly from tree to tree along the rows, finally inevitably destroying every tree of this species in the immediate vicinity.

In the autumn of 1883, I directed an assistant, Mr. Webster, to dig up a tree which had nearly died in this manner during the summer, and to carefully examine the larger roots, the trunk, and all the branches, with a view to ascertaining, if practicable, the cause of the difficulty. The roots were found unaffected, but on peeling the bark from the trunk, about half-grown larvæ of *Saperda tridentata* appeared in considerable numbers in the still living parts of the wood, and those of *Magdalis armicollis* (Plate XI. Fig. 3) were abundant where the bark and wood were already dead. The manner in which the bark had been mined and burrowed by the Saperdas, gave sufficient evidence of the cause of the death of the tree, the borers having again and again completely girdled the trunk.

Both the trunk and branches of this tree were cut up in lengths and boxed for the purpose of determining the details of the life history of the species. The specimens were boxed Aug. 8, the cracks of the boxes being closed by pasting over them strips of paper, and each having left a glass covered opening in the top, to which it was assumed that the insects emerging would be attracted. Later, this cover was removed, and a glass jar was inverted over the opening.

Nothing emerged until the following spring, except a single parasite taken September 14. On the 9th April, living larvæ of Saperda were found still within the wood, but no imagos had appeared in the boxes, neither were any pupæ discovered. On the 17th of that month, both larvæ and pupæ were detected, and on the 2d of May, the first imagos appeared, three in number. On the third another imago emerged, on the 5th five more, on the 7th eighteen, on the 8th eleven, and on the 12th twenty-three, this being the largest number taken from the boxes at once. Beetles continued, however, to emerge at frequent intervals until the 22d June, at which time the last appeared, one hundred and eighteen in all, having been taken alive. On the 15th September, the boxes were opened finally, thoroughly searched, and fifty-three more dead Saperdas were found. The boxes in which these specimens transformed, had been kept under cover, but at the natural temperature of the air.

Although the elm borer has evidently been for several years both numerous and increasing in the neighborhood where this tree was destroyed, the amount of parasitism developed by the experiments was quite insignificant, only eight parasitic insects, belonging to three species, appearing in the boxes as against the one hundred and seventy-one examples of the adult borer; and, indeed, as the same pieces of wood contained a great host of the larvæ of *Magdalis armicollis*, from which multitudes of imagos of this species emerged during this spring, it is impossible to say that some or most of this small number of parasites may not have escaped from the latter species.

Since the time of Harris, the elm tree borer has been well known as a destructive enemy of this most magnificent and beautiful of the shade trees of our towns and cities. It seems first to have attracted attention as an enemy of the elm in Boston, in 1847, at which time the trees on the Boston common were found by Harris to have suffered terribly from the ravages of this insect. "Several of them," he says, "had already been cut down, as past recovery; others were in a dying state, and nearly all of them were more or less affected with disease or premature decay. Their bark was perforated, to the height of thirty feet from the ground, with numerous holes, through which insects had escaped; and large pieces had become so loose, by the undermining of the grubs, as to yield to slight efforts, and come off in flakes. The inner bark was filled with the burrows of the grubs, great numbers of which, in various stages of growth, together with some in the pupa state, were found therein; and even the surface of the wood, in many cases, was furrowed with their irregular tracks. Very rarely did they seem to have penetrated very far into the wood itself; but their operations were mostly confined to the inner layers of the bark, which thereby became loosened from the wood beneath."

The borers, (the larvæ of the beetles) are similar in form and general appearance to the notorious round-headed borer of the apple, belonging, indeed, to the same genus. They rarely exceed three-fourths of an inch in length, are destitute of feet, and have the usual enlargement of the first segment of the body immediately behind the head. The body is white, subcylindrical, a little flattened, with the lateral fold of the body rather prominent; end of the body flattened, obtuse, and nearly as wide at the end as at the first abdominal ring. The head is one-half as wide as the prothoracic ring, being rather large. The prothoracic segment, or that next to the head, is transversely oblong, being about twice as broad as long; there is a pale dorsal corneous transversely oblong shield, being about two-thirds as long as wide, and nearly as long as the four succeeding segments; this plate is smooth, except on the posterior half, which is rough, with the front edge irregular and not extending far down the sides. Fine hairs arise from the front edge and side of the plate, and similar hairs are scattered over the body and especially around the end. On the upper side of each segment is a transversely oblong ovate roughened area with the front edge slightly convex, and behind slightly arcuate. On the under side of each segment are similar rough horny plates, but arcuate in front, with the hinder edge straight.

The beetle resulting from this larva is of a dark brown color, with a tint of gray, owing to a thin coating of very short down. It is ornamented with a curved line behind the eyes, two stripes on the thorax, and a three-toothed or three-branched stripe on the outer edge of each wing-cover of a rusty red color. There are also six black dots on the thorax, two above, and two on the sides; and each of the angles between the branches and the lateral stripes of the wing-covers is marked with a blackish spot. The two hinder branches are oblique, and extend nearly or quite to the suture; the anterior branch is short and hooked. Its average length is about half an inch; but it varies from four to six-tenths of an inch. The males are smaller than the females, but have longer antennæ.

From the present appearance of the elms throughout the towns of Central Illinois where I have had an opportunity to examine their condition, and from the rapid progress which this pest has made among them during the last two or three years, it seems extremely likely that it will totally exterminate the trees unless it be promptly arrested by general action. The only remedy available is unquestionably the destruction of affected trees in autumn and winter before the beetles have a chance to emerge from the trunks. In towns this measure should usually be taken by the authorities, since individual action could not be depended on to more than palliate the difficulty. If every elm which is in the unhealthy condition above described, and which, upon examination, is found to harbor these borers beneath the bark, were cut down in autumn and burned before spring, the multiplication of the borer might be effectually checked; but if the destruction of the trees be postponed until as late as May, a part of all of the beetles maturing each year would escape to carry the mischief elsewhere.

2. THE ELM PLANT LOUSE.

(*Schizoneura rileyi*, Thos.)

Order HEMIPTERA. Family APHIDIDÆ.

Finding an elm at Normal seriously infested by this louse, and apparently upon the point of death from the effects upon its foliage, I tried the experiment of applying pyrethrum for the destruction of the insect. A large branch was dusted with a mixture of one part of pyrethrum to ten of flour, at 9:30 a. m., July 4, and soon after the lice began falling from the twigs. At 6 p. m. only a few remained, and by 8 a. m. of the second day thereafter all had fallen off and were lying dead upon the table. Spraying the foliage of these trees with water in which pyrethrum was suspended in the proportion of about a tablespoonful to a gallon of water would, consequently, in all probability, destroy the lice, or at least so effectually check their multiplication as to prevent injury to the trees.

3. AN ELM BARK LOUSE.

(*Lecanium*, sp.)

Order HEMIPTERA. Family COCCIDÆ.

On the twigs of the white elm, at Normal, we found, this last season, a large brown bark louse very similar in size, shape and general appearance to the maple Pulvinaria previous to the appearance of the cottony egg mass beneath the body of the female, but differing especially in the fact that the eggs were not enclosed in the waxy filamentous masses or nests characteristic of Pulvinaria.

As we obtained only the adult female, we had not the material for determining or describing the species. The matured scales are nearly circular, 5 mm. in diameter, vaulted, emarginate before and behind, the upper surface more or less shining, dark brown, irregularly pitted on the central area, (where, however, it is nearly smooth), and deeply and irregularly punctured on the sides,—below the punctures irregularly rugose. The eggs are oval, .099 mm. in length by .048 mm. in transverse diameter. Beneath females obtained July 2, were eggs in various stages of development, young which had just hatched, and those which had just passed the first moult.

4. THE THREE-BANDED LEAF HOPPER.

(*Typhlocyba tricincta*, Fitch.)

Order HEMIPTERA. Family COCCIDÆ.

About the middle of June, this pale yellow leaf hopper, distinguished by two transverse dusky bands, (one across the middle and one at the tips of the wing covers), and a dusky cloud upon the scutellum, was abundant enough upon the leaves of the white elm, at Normal, to do considerable damage. This species, described by Fitch in his Third Report as State Entomologist of New York, (p. 74), was originally found by him, in abundance, on raspberry and currant bushes, and on grape vines.

ARTICLE VIII.—BRIEF MISCELLANEOUS NOTES.

1. Black Locust.

(*Nematus robiniæ*, n. s.)

(Plate XII. Fig. 5.)

From a number of saw fly larvæ found infesting the black locust (*Robinia pseudacacia*) at Normal, we bred during the latter part of July a small saw fly related to *Nematus bivittatus* and *aureopectus*, but apparently undescribed.

Body stout, pale brownish yellow; mesothorax with a black vitta upon each side; metathorax with a transverse black band continuous with the posterior extremities of the mesothoracic stripes; tergum blackish with the sides and posterior margins of the segments of the general color; prothorax between the ends of the mesothoracic stripes a little darker brown; head slightly darker than the body, with a quadrate black spot upon the occiput, extending forward to include the ocelli. This area is slightly shining, but the adjacent surfaces of the head are dull, punctured, and rather densely pubescent. Antennæ longer than the head and body, third and fourth joints equal; clypeus emarginate in front. The under parts and legs are uniform pale yellow brown, except the tibiæ and tarsi of the posterior pair which are dusky, and the genital valves of the female, which are black. Wings hyaline, veins fuscous, costa and stigmata yellowish, second submarginal cell slightly angled at the recurrent nervules, of which there are two about equally removed from the two extremities of the cell. First submarginal quadrate, distinct; posterior margin of wing behind the lanceolate cell slightly tinged with yellowish.

Length of body 4 mm.; expanse 10 mm.

Described from a single female.

The larva from which this specimen was bred entered the ground July 8, the imago emerging on the 26th.

2. Onion.—At Champaign, July, 1883, my attention was called by Prof. Burrill, to some hairy larvæ that were destroying onions in his gardens, as far as their numbers enabled them. Although this seemed to be the larva of *Spilosoma virginica*, Fab., its colors were somewhat unusual, and we bred it for identification; but the imagos proved to be unquestionably that species.

3. Egg Plant.—At Godfrey, September 25, the leaves of egg plants were found badly riddled by a small flea beetle, *Crepidodera cucumeris*, Harris.

4. Larch.—In June, the foliage of the larches in the grounds of the University at Normal, were seriously affected by the red spider (*Tetranychus telarius*, L.,) some of the trees seeming likely to die. On one of those worst infested we tried the effect of spraying with a kerosene emulsion made with soap, and diluted to contain two and a half per cent. of kerosene. The insects were greatly reduced in number by a single application, but not all killed. The trees soon revived appreciably as compared with those not treated.

5. Willow.—The leaves of the willow at Normal were generally infested both in 1883 and 1884, by the larvæ of *Apatela oblinita*, those collected July 6 pupating on the 11th and emerging on the 29th.

Orgyia leucostigma, Smith, was rather abundant on the willow in the University grounds at Normal.

Larvæ of *Plagiodera lapponica*, L., taken on the willow at Normal, June 24, commenced to pupate July 1, and to emerge on the 3d, the last of about sixty appearing on the 8th.

The adult, *Crepidodera helxines*, L., was found repeatedly throughout May in Central and Southeastern Illinois, devouring the leaves of willows, and scarcely less commonly upon the Lombardy poplar and the balm of Gilead, doing decided injury to young trees in the nurseries.

6. Cherry.—From my friend, Dr. E. R. Boardman, of Elmira, Stark county, I learned on the 9th June that the common willow slug (*Nematus ventralis*, Say) had almost completely defoliated a fine tree of wild cherry on his grounds. The species has long been known as an enemy of the willow, but has not been heretofore reported as injurious to any fruit tree.

During this month of June the cherry slug (*Selandria cerasi*, Peck) was especially abundant, completely whitening the leaves of many trees, and doubtless killing some. The efficacy of hellebore for the destruction of this insect is well known, but as the use of so poisonous a substance is often unadvisable, we experimented somewhat carefully with two other insecticides—the kerosene emulsion and pyrethrum, a five per cent. dilution of the former, containing two and a half per cent. of kerosene, and one ounce to a gallon of the latter. We found these in both cases entirely effective, only a small percentage of the larvæ treated escaping.

7. Currant and Gooseberry.—The green apple leaf hopper (*Empoa albopicta*, Forbes,) was seen by us upon the currant and gooseberry at Normal, in numbers sufficient to do serious injury, causing the leaves to curl and shrivel.

A number of leaf rollers of the currant, collected at Normal on the 12th May,—white, smooth, with shining jet black head, mouth parts, and cervical shield, prothoracic segment except the shield reddish with two oblong black tubercles upon the sides of this segment, the anterior legs black, tarsi of the others dusky,—emerged

June 9 as small olive-drab moths, determined by Prof. Fernald, of Orono, Maine, as *Eccopsis exoletum*, Zeller—a species not heretofore reported west of New York, and whose larval history was unknown. Each segment of the larva bears one or two transverse rows of long black hairs about half the length of the segment, each row containing five or six hairs. The head and cervical shield are also sparsely hairy and the legs considerably so. The first spiracle, wholly within the anterior segment, is conspicuous, dark brown; the others minute and pale. Head and cervical shield wholly unmarked except a faint slender median line on the latter. Length .4 of an inch.

The anterior wings of the imago are olive-gray, crossed by a median shade of deep olive, and slightly deepening also towards the terminal margin. The whole surface of the wing is finely irrorate with blackish specks, arranged in the form of slender waved lines, of which there are from twelve to fifteen on the length of the wing. An oblique dusky shade extends from the posterior margin at the base of the wing to the middle of the discal cell. A black apical spot represented by five whitish bands upon the costa, each divided by a slender olive line, all these bands tending upward to a point on the outer margin a little behind the apical spot. The basal half of costa with alternating black and white spots, the former being the plainer ends of the wavy lines already mentioned. Fringe concolorous with wings dusky at apex and on the middle of the outer margin. Hind wings dusky, slightly bronzed; fringe pale, dusky at tip; antennæ brown; palpi white beneath, dusky at the tip; thorax bronzed gray, plain; legs black, ringed with pale.

The same larva was found upon the gooseberry May 16, pupated June 9, in leaf, and emerged on the 16th of that month.

EXPLANATION OF PLATES.*

PLATE I.

Fig. 1. The Root Web Worm, *Crambus zeëllus*; magnified one and a half diameters. (Original.)

Fig. 2. Imago of same; magnified two diameters. (Original.)

Fig. 3. Corn plant injured by Root Web Worm: *a*, tubular nest in the earth; *b*, gnawed surface of stalk; *c*, tip of severed leaf drawn into mouth of nest. (Original.)

Fig. 4. The Sulphur Leaf Roller, *Dichelia sulphureana*; magnified two and threefourths diameters. (Original.)

Fig. 5. The Wheat Straw Worm, *Isosoma tritici*: *a*, larva, ventral view; *b*, do., lateral view; *c*, antenna; *d*, mandibles; *e*, anal end, ventrally; *f*, imago; *g*, *h*, front and hind wings of exceptional individuals; *i*, aborted wing in the normal flies,—all relatively enlarged. (After Riley.)

Fig. 6. Parasite of the Wheat Straw Worm, *Eupelmus allyni*; magnified nine diameters. (Original.)

PLATE II.

The Hessian Fly, *Cecidomyia destructor*, and its transformations. A healthy stalk of wheat on the left, the one on the right dwarfed and the lower leaves beginning to wither and turn yellow; the stem swollen at three places, near the ground where the flaxseeds (h) are situated, between the stem and sheathing base of the leaf.

a. Egg of the Hessian fly (greatly enlarged, as are all the figures except *e* and *h*); *b*, the larva, enlarged, the line by the side, in this and other figures, showing the natural length; *c*, the flaxseed, puparium, or pupa case; *d*, the pupa or chrysalis; *e*, the Hessian Fly, natural size, laying its eggs in the creases of the leaf; *f*, female Hessian Fly much enlarged; *g*, male Hessian Fly much enlarged; *h*, flaxseed between the leaves and stalk; *i*, Chalcid or Ichneumon parasite of the Hessian Fly, male, enlarged. (From 10th Report,)

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*The drawings for the original cuts on the following plates were made by Mrs. Rosalie Garman, with the exception of Fig. 3, Plate I, Fig. 4, Plate XI, and Fig. 4, Plate XII, which were drawn by Mr. H. Garman.

Plate III.

Fig. A. Side view of the female Hessian Fly, greatly enlarged.

a, three joints taken from the middle of the antenna of the female; a^1, the three terminal female antennal joints; a^{11}, the four basal, and a^{111}, the two terminal male antennal joints; *b*, a maxillary palpus; *c*, scales from the body and wings; *d*, *e*, side and vertical view of the last joint of the foot, showing the claws and foot-pad or pulvillus between them, and the scales on the joint.

Fig. B. Larva magnified with the "breast-bone" in the second ring next to the head.

B*a*, the breast-bone highly magnified; B*b*, head from beneath enlarged; B*c*, larval spiracle and its tubercle and trachea leading from the spiracle.

Fig. C. Side and front view of the pupa or chrysalis. The abdomen of the side view is rather long, as the insect, when drawn, was just emerging from the semi-pupa stage which it assumed December 1.

Fig. D. The flaxseed, puparium, or pupa case.

The line by the side of the complete figures denotes the natural length of the insect. (From 10th Report.)

Plate IV.

Fig. 1. Parasite of the Hessian Fly, *Pteromalus pallipes;* magnified eight diameters. (Original.)

Fig. 2. Parasite of the Hessian Fly, *Pteromalus fulvipes;* magnified seven diameters. (Original.)

Fig. 3. The Wheat Midge, *Diplosis tritici: a*, male; *b*, female; a^1, natural size; *c*, wing, greatly enlarged; *d*, antennal joints of male; *e*, do., of female; *f*, ovipositor; *g*, eggs, greatly magnified; *h*, flower of wheat, showing larvæ on kernel; *i*, larva in repose; *j*, do., crawling; j^1, natural size; *k*, enlarged view of anterior end when moving; *l*, posterior end, with teeth protruding to aid in motion. (After Fitch.)

Fig. 4. The Wheat Bulb Worm, *Meromyza americana*, larva; magnified sixteen diameters. (From 13th Report.)

Fig. 5. Pupa enclosed in puparium; magnified thirty diameters. (From 13th Report.)

Fig. 6. The same; ventral view. (From 13th Report.)

Fig. 7. Egg; magnified sixty diameters. (From 13th Report.)

Fig. 8. Imago, or adult fly; magnified twelve diameters. (From 13th Report.

Plate V.

Fig. 1. The Grass Worm, *Laphygma frugiperda: a*, adult larva; *b*, head, front view; *c*, dorsal view of abdominal segment; *d*, lateral view of abdominal segment.

Fig. 2. Imago of the Grass Worm: *a*, typical form; *b*, *c*, varieties.

Fig. 3. Grain Leaf Hopper, *Cicadula nigrifrons*; magnified five and three-fourths diameters; front wing and front view of head more highly magnified. (Original.)

Fig. 4. Grain Leaf Hopper, *Cicadula quadrilineatus;* magnified five and three-fourths diameters; front wing and front view of head more highly magnified. (Original.)

Fig. 5. Sketch of wheat field infested by the Grass Worm, showing areas denuded.

PLATE VI.

Fig. 1. The Yellow Sorghum Aphis, *Chaitophorus flavus*, wingless viviparous female; magnified twenty-five diameters. (From 13th Report.)

Fig. 2. *Chaitophorus flavus*, pupa, dorsal view. (From 13th Report.)

Fig. 3. The same, side view. (From 13th Report.)

Fig. 4. *Chaitophorns flavus*, winged viviparous female; magnified twenty diameters; *a*, antenna of the same more highly magnified. (From 13th Report.)

Fig. 5. *Cymatophora crepuscularia.* (Re-drawn by Mrs. Garman from Packard's Monograph.)

Fig. 6. Omitted.

Fig. 7. Clover Mite, *Bryobia pratensis;* magnified twenty-one diameters. (Original.)

Fig. 8. Apple Leaf Roller, *Cacœcia rosaceana;* larva, pupa, and moth.

Fig. 9. *Tortrix pallorana.* (Original.)

PLATE VII.

Fig. 1. Strawberry Worm, *Emphytus maculatus:* 1, ventral view of pupa; 2, side view of same; 3, enlarged sketch of perfect fly, the wings on one side detached; 4, larva crawling, natural size; 5, perfect fly, natural size; 6, larva at rest; 7, cocoon; 8, enlarged antenna, showing joints; 9, enlarged egg. (After Riley.)

Fig. 2. The Tarnished Plant Bug, *Lygus lineolaris*, adult; magnified fifteen diameters. (From 13th Report.)

PLATE VIII.

Fig. 1. The Tarnished Plant Bug, *Lygus lineolaris*, fourth stage; magnified fifteen diameters. (From 13th Report.)

Fig. 2. The same, second stage; magnified fifteen diameters. (From 13th Report.)

Fig. 3. The same, first stage; magnified fifteen diameters. (From 13th Report.

PLATE IX.

Fig. 1. The Strawberry Root Worm, larva of *Scelodonta pubescens.*

Fig. 2. Pupa of *Scelodonta pubescens.*

Fig. 3. Imago of *Scelodonta pubescens;* magnified sixteen diameters.

Fig. 4. The Vine-Loving Fruit Fly, *Drosophila ampelophila.* (Re-drawn by Mrs. Garman from Comstock's Report.)

Fig. 5. Egg, larva, and pupa of the same. (Re-drawn by Mrs. Garman from Comstock's Report.)

Fig. 7. The Blackberry Leaf Miner, *Metallus rubi*; magnified three diameters. (Original.)

PLATE X.

Fig. 1. *Pyrrhia umbra.* (Original.)

Fig. 2. Raspberry Plume Moth, *Oxyptilus delavaricus;* magnified. (Original.)

Fig. 3. Moth of the Speckled Cutworm, *Agrotis c-nigrum.* (Original.)

Fig. 4. *Biston ypsilon.* (Original.)

Fig. 5. The Apple Leaf Skeletonizer, *Pempelia hammondi: a,* larva, natural size; *b,* one of middle segments of larva, magnified; *c,* head and first three segments, dorsal view; *d,* adult moth.

Fig. 6. Yellow Jumping Pear Louse, *Trioza pyri;* magnified seven diameters. (Original.)

Fig. 7. The Willow Saw Fly, *Dolerus arvensis.* (Original.)

PLATE XI.

Fig. 1. The Soft Maple Bark Louse, *Pulvinaria innumerabilis: a,* twig with adult fly and egg masses; *b,* mature female scale seen from above; *c,* mature female scale seen from beneath.

Fig. 2. The same in autumnal condition: *a,* twig with half-grown female scales; *b,* autumnal female scales seen from above; *c,* the same seen from beneath.

Fig. 3. *Pandemis lamprosana.* (Original.)

Fig. 4. *Aleurodes aceris,* mature scale; magnified five and a half diameters. (Original.)

Fig. 5. Imago of the above. (Original.)

Fig. 6. *Elaptus aleurodis;* magnified twenty-three diameters. (Original.)

PLATE XII.

Fig. 1. *Lygus invitus;* magnified four diameters. (Original.)

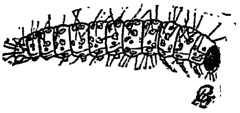
Fig. 2. The Elm Borer, *Saperda tridentata;* natural size. (Original.)

Fig. 3. *Magdalis armicollis;* magnified. (Original.)

Fig. 4. Parasite of Corn Aphis, *Adialytus maidaphidis:* *a*, first, second, and third articles of antenna of female; *b*, distal article of antenna of female; *c*, mandible of female; *d*, maxilla and palpus; *e*, four distal articles of antenna of male; *f*, hind leg of female; *g*, valve of ovipositor; *h*, fore wing of female; *i*, hind wing of female; *j*, abdomen of female; *k*, abdomen of male, side view; *l*, ovipositor, separated from valves; *sh*, sheath; *la*, lancelet; *m*, larva of Adialytus, taken from body of Corn Aphis in December. (Original.)

Fig. 5. *Nematus robiniæ;* magnified three diameters. (Original.)

PLATE I.



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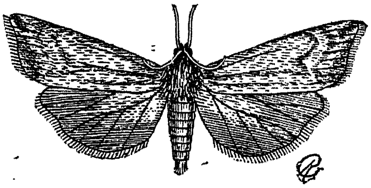

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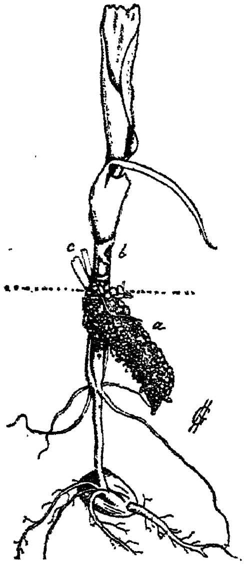

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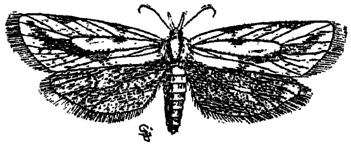

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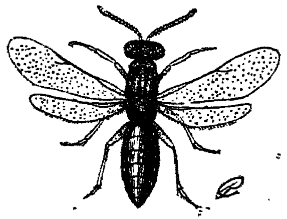

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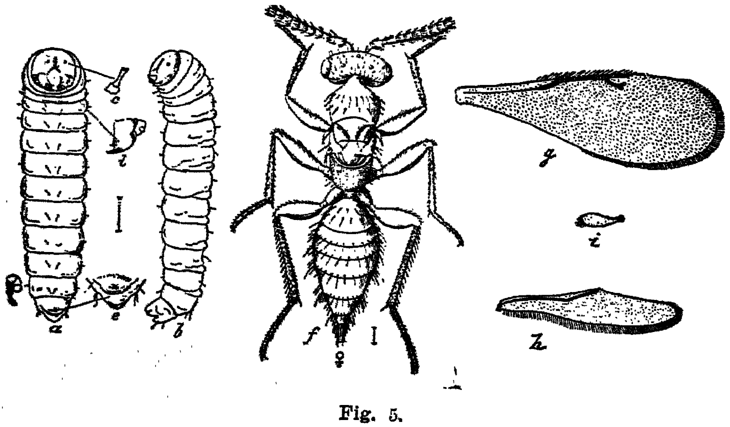

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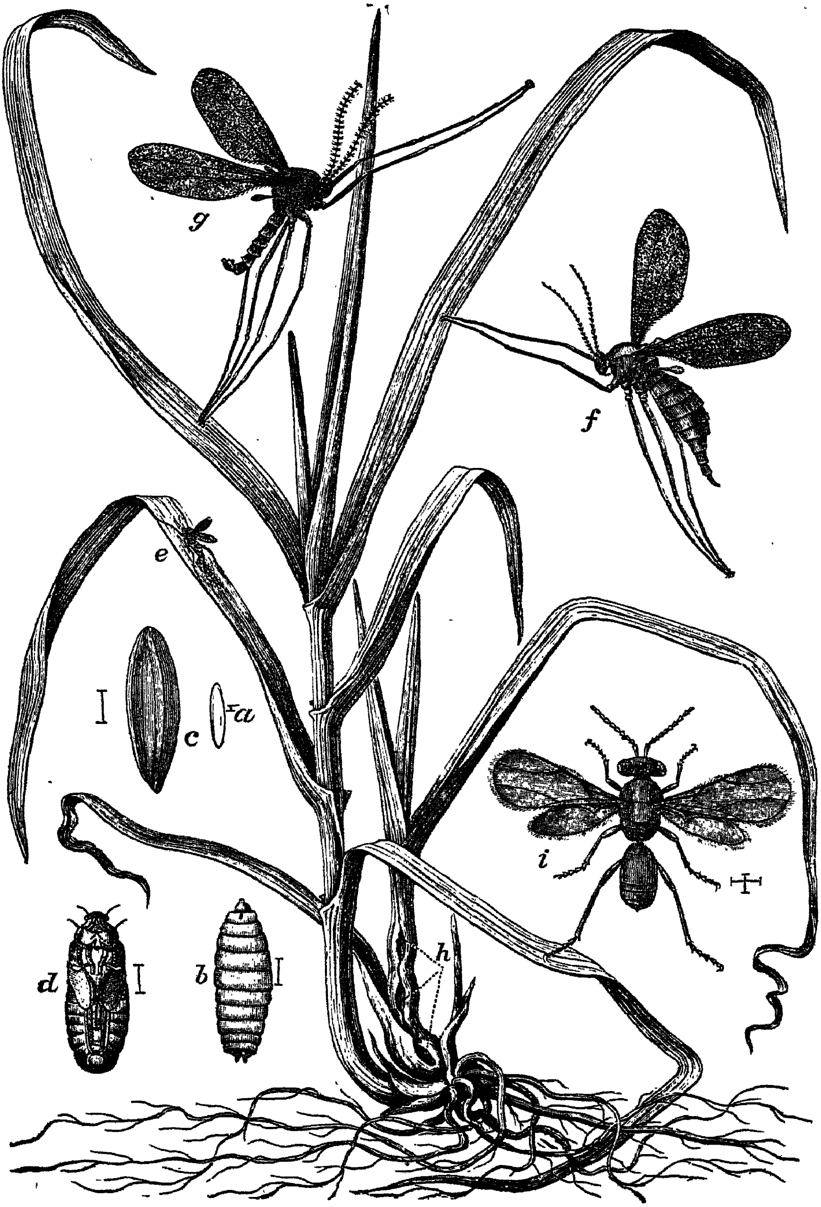

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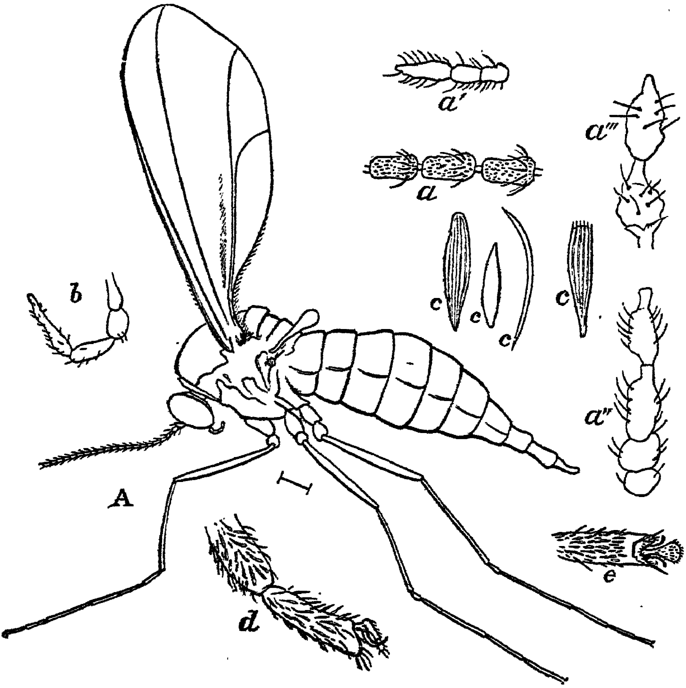

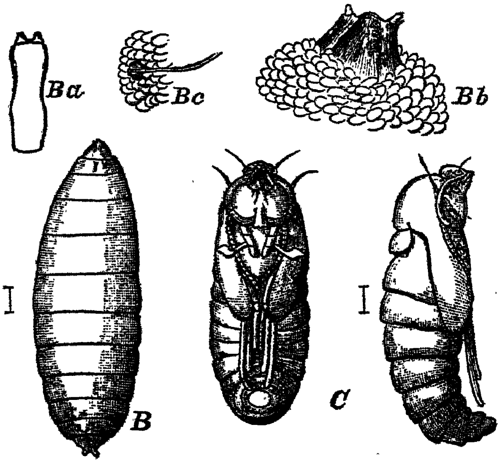

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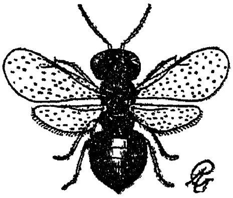

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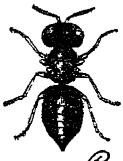

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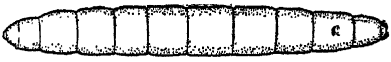

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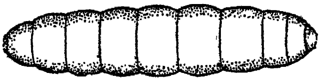

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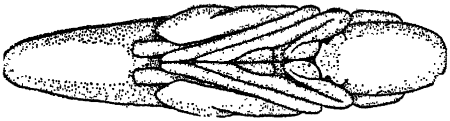

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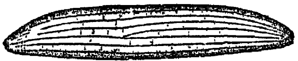

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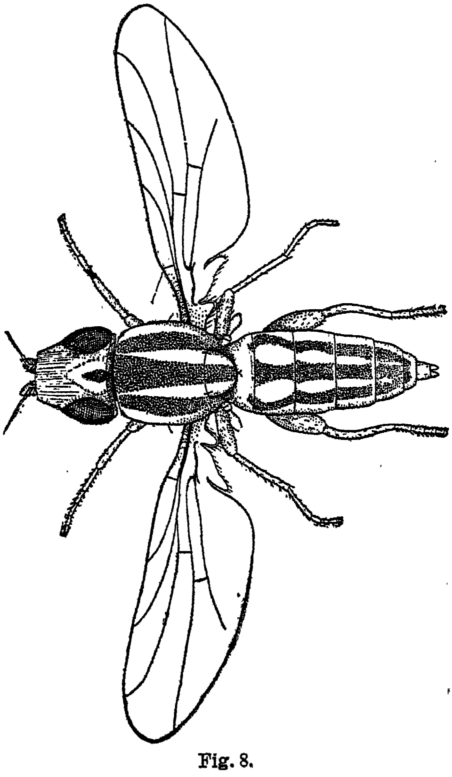

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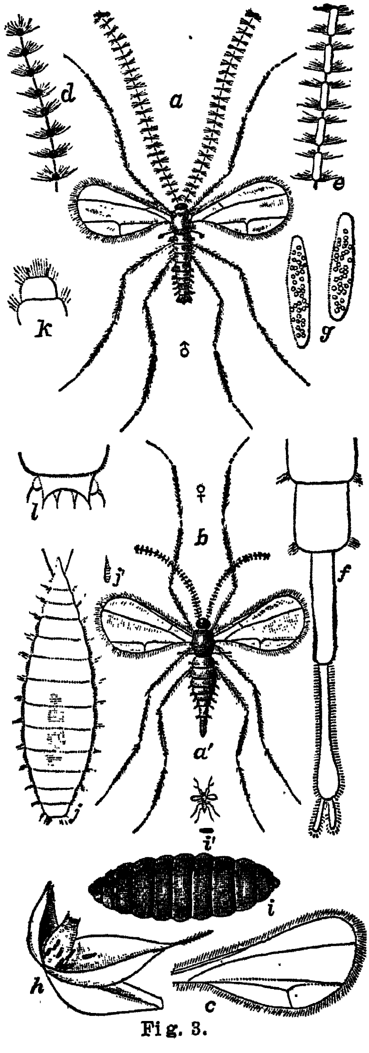

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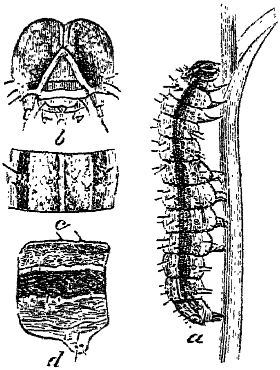

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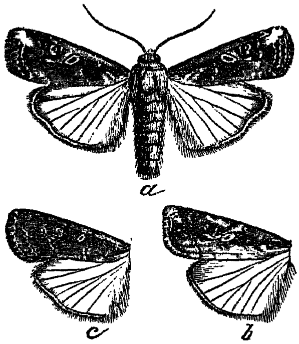

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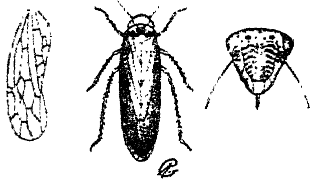

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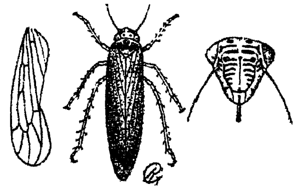

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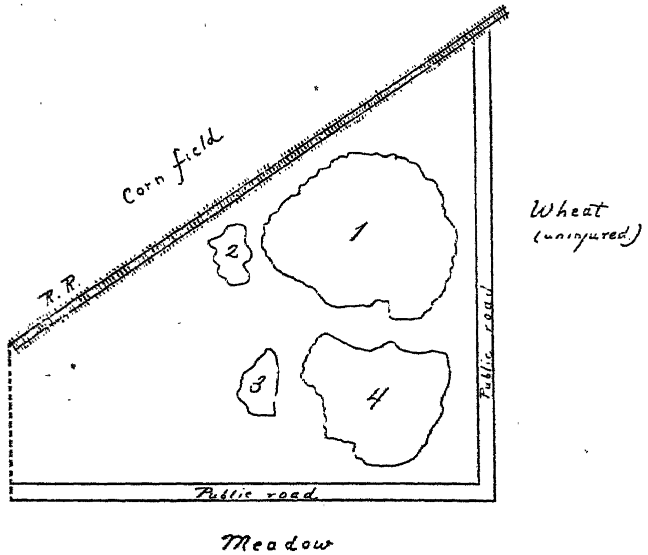

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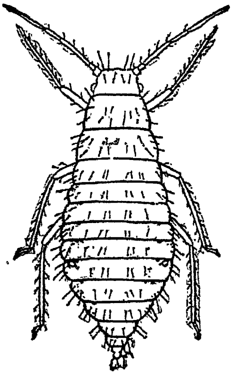

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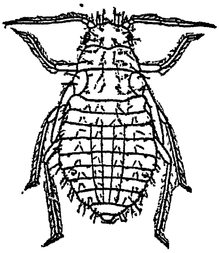

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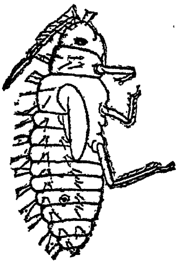

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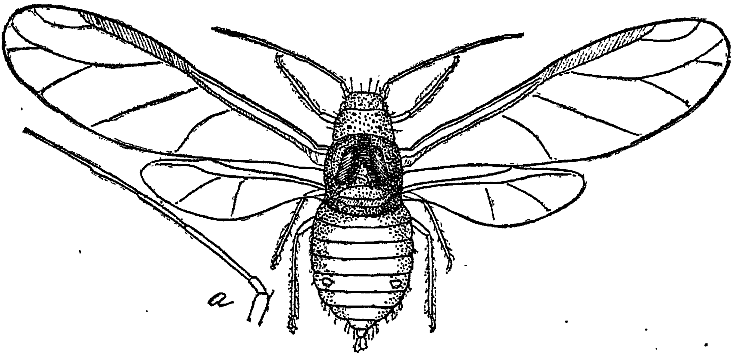

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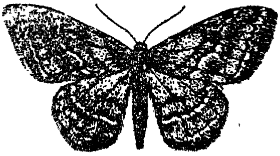

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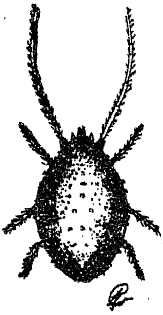

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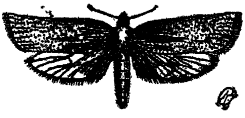

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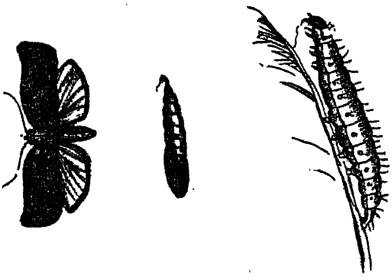

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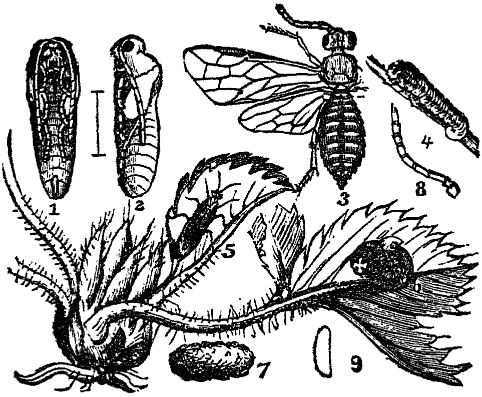

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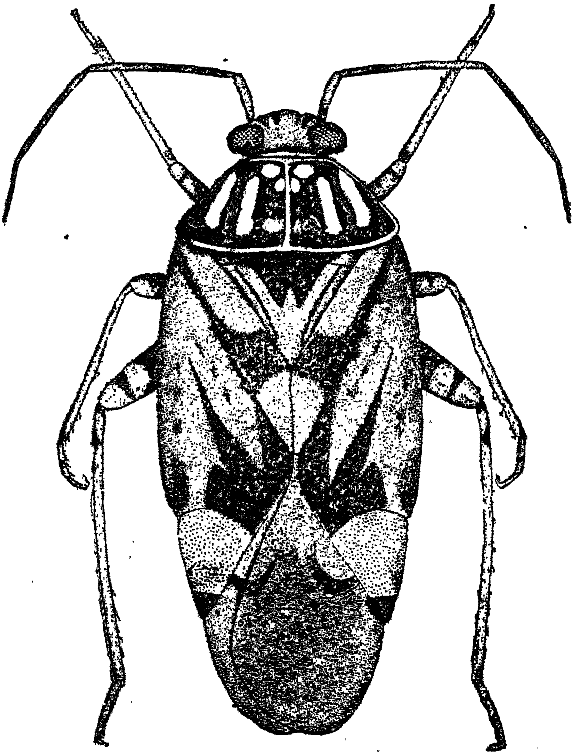

Fig 2.

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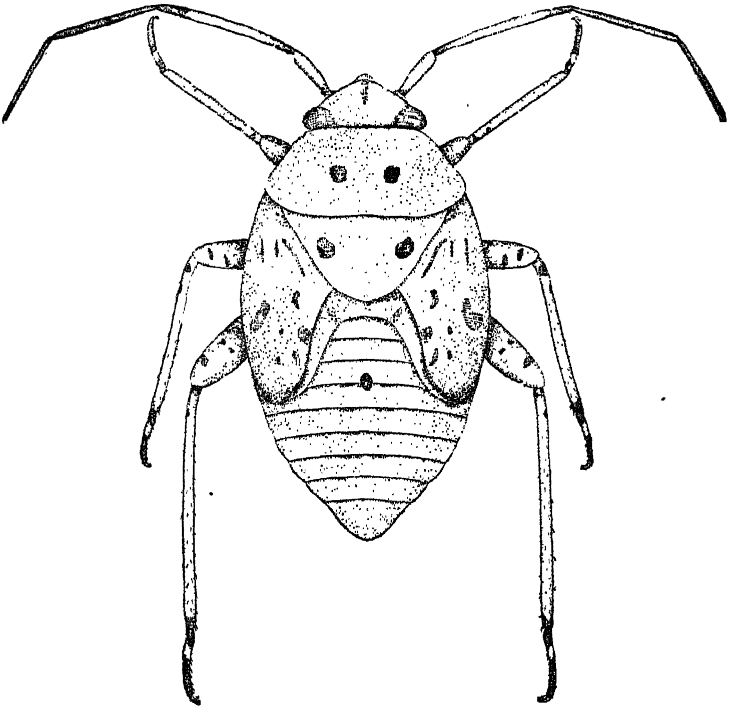

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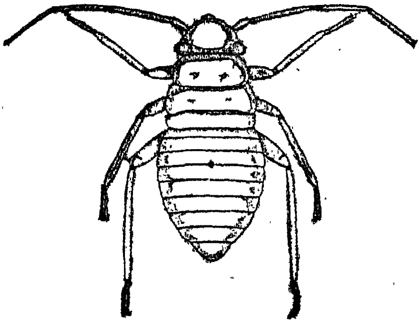

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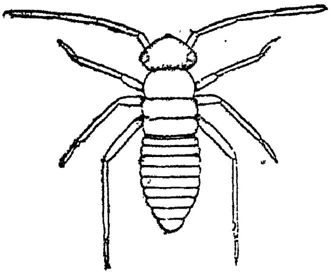

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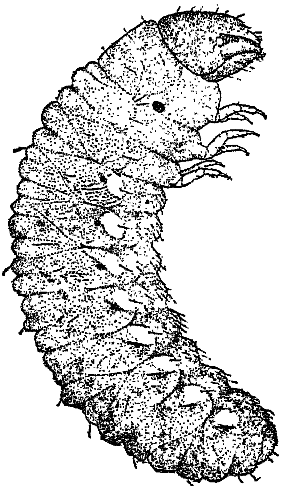

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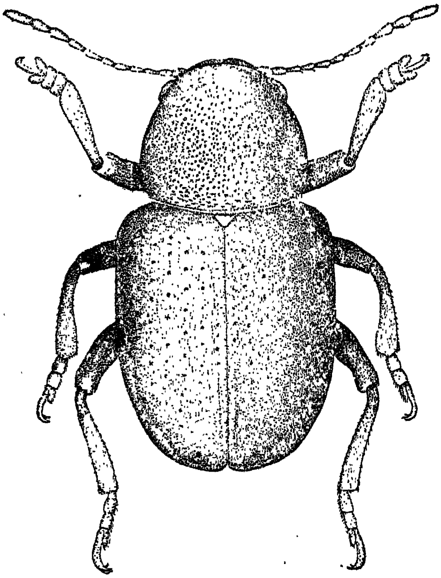

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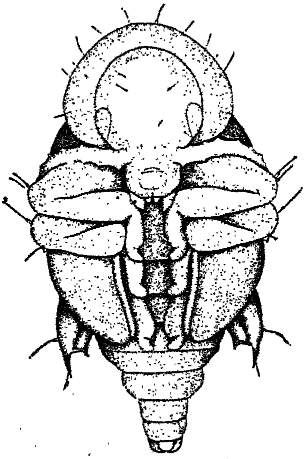

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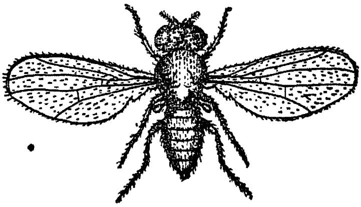

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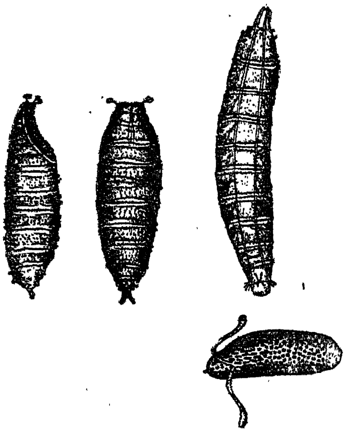

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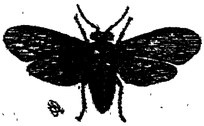

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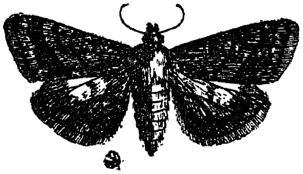
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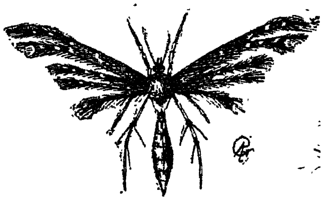
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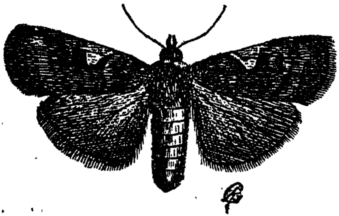
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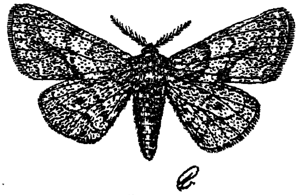
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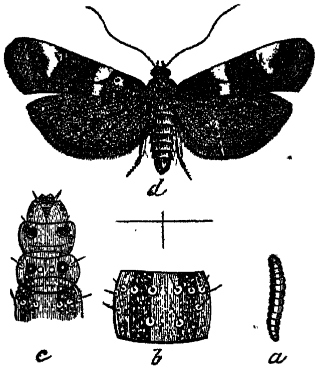

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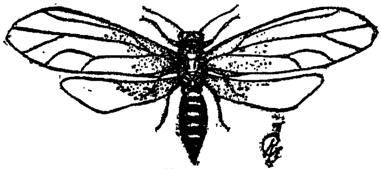
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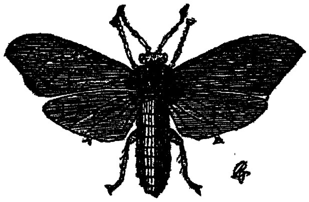
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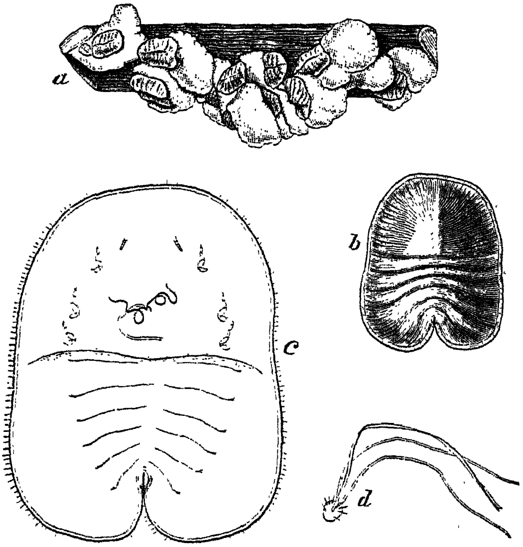

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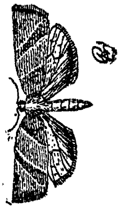

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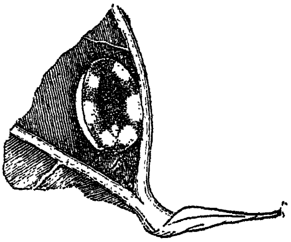

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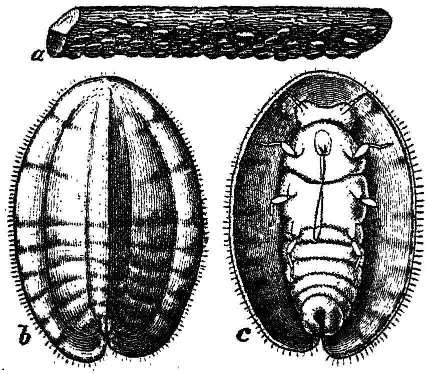

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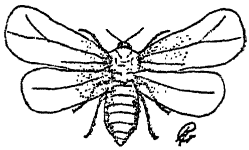

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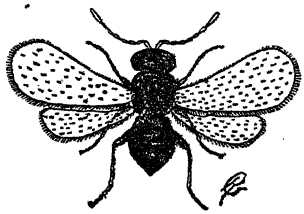


Fig. 6.

Plate XII.

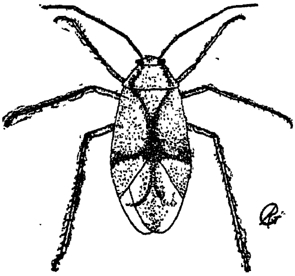
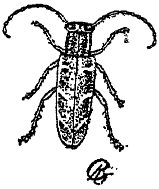


Fig. 1.



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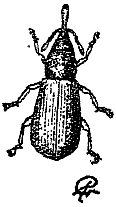

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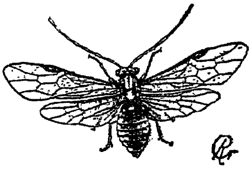

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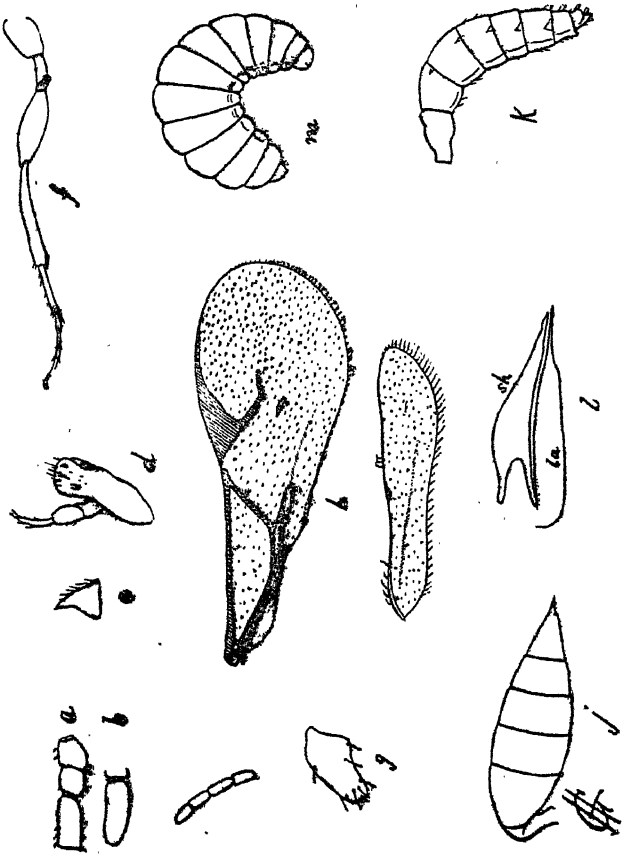

Fig. 4.

ERRATA

Page 3, line 10 from bottom, for infected, read infested.

Page 5, line 6 from bottom, after 1883, insert, at which time.

Page 6, line 6 from bottom, for grower, read fields.

Page 14, line 8 from bottom, for S. read Y; line 9 from bottom, for S-shaped, read Y-shaped; line 18 from bottom, for larvæ, read larva.

Page 16, line 22, for attack, read attacked.

Page 17, line 7, for secured, read secreted.

Page 18, line 9, after history, add, in Papilio, Vol. III, p. 99.

Page 22, foot note, for 63, read 67; line 10 from bottom, after *nobilis*, insert Harris; line 14 from bottom, for Tettigonidæ, read Jassidæ.

Page 23, lines 21 and 27, for Caloptenus, read Pezotettix.

Page 24, line 21 from bottom, for the first when, read where.

Page 26, line 1, for subsequal, read subequal; line 21, for viviporous, read viviparous; line 13 from bottom, for differs, read differ.

Page 27, line 18 from bottom, for their stalks, read the more advanced stalks.

Page 28, line 17, for evidently, read evident.

Page 29, line 12 from bottom, for the first the, read they.

Page 30, line 3, for females, read female.

Page 33, line 1, for interior, read inferior.

Page 35, line 22, for pronotum, read pronotal spot.

Page 36, strike out lines 26-28.

Page 44, line 20, strike out "and mention is made of two others not fully studied."

Page 45, line 17 from bottom, for sutures, read suture.

Page 48, line 5 from bottom, for when, read where.

Page 54, line 13 from bottom, for 9, read 8.

Page 61, line 16 from bottom, for appears, read appear.

Page 66, line 20, for the second 1881, read 1882.

Page 68, line 12, for in, read of.

Page 72, strike out line 7 from bottom (reference to plate); lines 16 and 17, strike out "prolegs pale brown, blackish at base."

Page 77, line 8 from bottom, strike out report.

Page 82, line 3 from bottom, for more, read less.

Page 83, line 18, for 1-3, read 4-5.

Page 89, line 12 from bottom, for tubucles, read tubercles.

Page 94, line 20 from bottom, after is, insert of.

Page 104, line 11 from bottom, strike out the.

Page 105, line 7, for those, read that; line 10, for probably, read possibly; line 9 from bottom, for *guercitronis*, read *quercitronis*.

Page 106, line 2 from bottom, for this, read these.

Page 108, line 6, for those, read that; line 14 from bottom, before soaps, read common.

Page 109, line 3, for injery, read injury.

Page 110, line 16 from bottom, strike out "that of."

Page 112, line 13 from bottom, for XI, read XII.

Page 114, line 7 from bottom, after part, for of, read or.

Page 117, line 21, after adult, insert of; line 8 from bottom, for *albopita*, read *albopicta*.

APPENDIX

TO THE

FOURTEENTH REPORT.

GENERAL INDEXES

TO THE

FIRST TWELVE REPORTS

OF THE STATE ENTOMOLOGISTS OF ILLINOIS,

B. D. WALSH, FRANCIS LEBARON, CYRUS THOMAS,
AND S. A. FORBES.

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Introduction V
Systematic list of species IX
General index to insects I
General index to food plants 69
General index to remedies, natural and artificial 95

INTRODUCTION.

The office of State Entomologist of Illinois was established by an act of the Legislature, approved and in force March 9, 1867, by which the Governor was authorized to appoint "by and with the consent of the Senate some competent scientific person as State Entomologist, who shall hold the appointment for two years and until his successor shall be appointed." This officer was required to investigate the entomology of Illinois, and particularly to study "the history of the insects injurious to the products of the horticulturists and agriculturists of the State;" and was directed to "collect and preserve a cabinet of insects to be deposited at the Illinois Industrial University." He was required to "prepare a report of his researches and discoveries in entomology for publication by the State annually;" and his salary was fixed at the sum of $2000 per annum.

The first appointee under this law was Benjamin Dane Walsh, of Rock Island, nominated by Governor Oglesby, June 11, 1867, at an extra session of the Legislature. The Senate, however, declined to act on the Governor's nominations at this special session, adopting, June 13, a resolution postponing such action until the next regular, meeting of the General Assembly, and Mr. Walsh's appointment was therefore not completed.

He nevertheless entered at once on the duties of the office, and prepared a report for the year 1867 as "Acting State Entomologist," which he submitted, not to the Governor, but to the State Horticultural Society. This report was published in 1868 as an appendix to Volume I of the new series of the Transactions of the Society (for 1867), and an unknown number of copies were also issued separately, in pamphlet form, with a slightly different title page.

At the next regular session of the Legislature, an act was passed "for the relief of the State Entomologist" (in force March 25, 1869) which recognized Mr. Walsh's appointment "and the faithful discharge of his full duties from the date of his nomination," directed "that he should receive the compensation provided by the statute under which he was appointed, as full compensation for his services from and after June 11, 1867, and until otherwise provided by law."

On the 12th November, 1869, Mr. Walsh died from the effects of a railway accident, without presenting any other report than that for 1867, already mentioned.

His successor was William LeBaron, of Geneva, Kane Co., appointed April 2, 1870. LeBaron's First Annual Report, the second of the series, counting that of Walsh as the first, was for the year 1870, and was published in August, 1871 as a separate pamphlet, the first edition, printed in February, having been destroyed by fire before publication. I have not been able to as certain that it was published in any other form.

Le Baron's Second Report, number three of the series, covered the year 1871, and was published in 1872 in Vol. III. of the Reports made to the General Assembly at its Twenty-seventh Session, convened January 4, 1871; and also as an appendix to the Transactions of the Illinois Horticultural Society for the year 1871.

His Third Report (the fourth from the office), for the year 1872, was published during the following year in the Reports made to the General Assembly for the session of 1873. It consisted of two parts, the first devoted to injurious insects simply, and the second, paged separately, consisting of an introduction to general and economic entomology, intended to prepare the way for a series of systematic reports on the several orders of insects.

The Fourth (and last) Report of Dr. Le Baron, cited in the following index as the fifth of the series, consisted of a reprint of Part II, of the preceding Report, followed by a systematic treatise on the order Coleoptera, paged continuously with the foregoing, the whole being issued as the Report for 1873. It was printed in the appendix to the Transactions of the State Horticultural Society for that year, and was also issued separately as an independent volume, copyrighted by the author.

Although Dr. Le Baron continued in office until the expiration of his term, April 9, 1875, no report seems to have been presented for the year 1874. His successor, Cyrus Thomas, was appointed April 13, 1875.

In the meantime the Legislature had, by an act "to change the fiscal year," approved March 29, 1875, and in force July 1 of that year, directed that the reports of a number of State officers, including the State Entomologist, should be rendered to the Governor on or before the first day of November in the year 1876, and biennially thereafter, closing with the fiscal year preceding each regular session of the General Assembly; and had further directed that no other annual or biennial report should be made by any of the officers mentioned. Dr. Thomas's First Report (the Sixth of the State Entomologist) was rendered, in accordance with this law, towards the close of the year 1876, and related to that year and the preceding. It is styled the "Sixth Report of the State Entomologist of Illinois. * * * * First Biennial Report, by Cyrus Thomas, Ph. D., State Entomologist of Illinois." This Report was published in the Transactions of the State Department of Agriculture for 1876 (Vol. 14).

Notwithstanding the direction above cited with respect to the period to be covered by the successive reports of the Entomologist, the Legislature passed, during the session of 1877, an act, approved and in force May 25 of that year, authorizing the State Board of Agriculture to append to and publish with their Annual Report the

Annual Report of the State Entomologist,* and repealing all acts and parts of acts inconsistent with that in which the above authorization is given, so far as the same related to the State Board of Agriculture. This law was interpreted by Dr. Thomas to make it the duty of the State Entomologist to report annually instead of biennially, and his Second Report (the seventh in all) was consequently rendered in 1877, and related to the work of that year. It was printed, as authorized by the above law, as an appendix to the Report of the State Department of Agriculture, and two hundred copies are understood to have been issued separately in pamphlet form.

The succeeding Reports, from the Eighth to the Eleventh, (from the third to the sixth of Thomas), have a similar history, all being annually published as appendices to the Agricultural Report of the corresponding year, and issued separately to the number of two hundred copies. These appendices are all paged separately, and are not mentioned upon the title page of the Report of the Department nor in the lettering upon the back of the volume.

The Eleventh Report (for 1881) was the last by Dr. Thomas, as he tendered his resignation early in 1882, to take effect June 30, of that year.

The present incumbent, Stephen Alfred Forbes, was appointed July 3, 1882, and his first Report, the Twelfth of the office and the last here indexed, although made as for the entire year then current, actually related only to the latter half of it.

To complete the record of the office to the date of writing, it may be added that the Thirteenth and Fourteenth Reports, for the years 1883 and 1884, were printed, like the preceding, as appendices to the Transactions of the State Department of Agriculture for the corresponding years, and that the usual editions of two hundred copies each were issued separately.

No office accommodations have ever been furnished the State Entomologist by the State, and the location of the office has consequently varied with the personal residence of the Entomologist,—that of Mr. Walsh at Rock Island, of Dr. LeBaron at Geneva, of Dr. Thomas at Carbondale, and that of Prof. Forbes, at first at the State Normal University, at Normal, but transferred to the Illinois Industrial University, at Champaign, at the beginning of the current year.

The first legislative appropriation to the State Entomologist for any expenses other than those of salary and the bare publication of his reports, was made at the session of 1873, when $700 was appropriated for the illustration of the reports of Dr. LeBaron for the years 1872 and 1873, and for the necessary stationery and postage stamps to be used in the performance of his official duties. Dr. LeBaron had received, however, previous to this time, from the contingent fund of the Governor, the sum of $2,685,

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*This provision was reiterated in 1883, in the amended law relating to the State Board of Agriculture.

$2,500 of which was intended and used for the purchase of the Walsh Collection of Insects, afterwards destroyed in the Chicago fire.

The next special appropriation to the office was made as an item in the appropriation bill for the State Laboratory of Natural History at Normal for the years 1883 and 1884, by which $500 per annum was assigned to the office and incidental expenses of the State Entomologist.

No provision has ever been made for a library for the Entomologist, or for a collection of the insects of the State for his use other than that required by law to be deposited with the State Industrial University.

The incidental association of the office of State Entomologist with that of Director of the State Laboratory of Natural History, brought about by the appointment of the latter officer to the former office in 1882, has, however, given to the State Entomologist command of the resources of the State Laboratory of Natural History, including its entomological collections and library, and has enabled him, since the above date, to draw upon the corps of assistants of this establishment for a large amount of important service.

The scope and variety of the fourteen reports of this office are sufficiently indicated by the voluminous lists and indexes necessary to give convenient access to their contents. In volume they far exceed the literature of the economic entomology of any other State, amounting in all to 2,358 pages, of which 104 have been contributed by Walsh, 419 by LeBaron, 1,187 by Thomas, and 648 by Forbes. They may broadly be said to contain four classes of matter,—(1) original contributions to entomology, chiefly prepared with reference to economic applications, characteristic especially of the first four and the last three reports; (2) treatises on the classification of single orders of insects, as in the 5th and 6th Reports (Coleoptera), the 7th and 10th (Lepidoptera), the 8th (Homoptera especially Aphides), and the 9th (Orthoptera); (3) full summaries of existing knowledge respecting the most important injurious insects, as the Hessian fly and the army worm; and (4) monographs of all the insect enemies of a single crop, as of the insects affecting the strawberry, in the 13th report.

Probably no one conversant with the facts can doubt that the State Entomologists of Illinois have devoted themselves faithfully and with distinguished success (far, in fact, beyond their rather meager opportunities) to the "investigation of the Entomology of Illinois, and particularly to the history of the insects injurious to the products of the agriculturists and the horticulturists of the State."

Champaign, Ill., June 30, 1885.

SYSTEMATIC LIST OF GENERA AND SPECIES.

ARTHROPODA.

INSECTA.

(iv, 203; vi, 65, appendix.)

HYMENOPTERA.

(iv, 25; v, 25; vi, 71; x, 63.)

SCOLIADÆ.

Tiphia inornata, Say, vi, 100.

ICHNEUMONIDÆ.

Ichneumon suturalis, Say, x, 41.
Pezomachus minimus, Walsh, x, 40.
Ophion purgatus, Say, x, 41.
Paniscus geminatus, Say, vii, 218.
Mesochorus vitreus, Walsh, x, 39.
Pimpla conquisitor, Say, vii, 119.

BRACONIDÆ.

Microdes carinodes, Cres., xi, 18.
Microgaster glomeratus, Linn., ix, 20.
  militaris, Walsh, x, 38.
Aphidius avenaphis, Fitch, viii, 176.
  lactucaphis, Fitch, viii, 175.
  polygonaphis, Fitch, viii, 175.
  viburnaphis, Fitch, viii, 175.
Trioxys cerasaphis, Fitch, viii, 176.
  populaphis, Fitch, viii, 176.
  salicaphis, Fitch, viii, 176.
Toxares triticaphis, Fitch, viii, 176.

PROCTOTRUPIDÆ.

Platygaster lecanii, Smith, vii, 129.

CHALCIDIDÆ.

Chalcis albifrons, Walsh, x, 40.
Haltichella perpulchra, Walsh, x, 39 (Hockeria perpulchra).
Eupelmus allyni, French, xi, 73 (Isosoma allynii).
Aphelinus mytilaspidis, LeB., ii, 34.
Glyphe viridescens, Walsh, x, 39.
Pteromalus gelechiæ, Webster, xii, 151.

TENTHREDINIDÆ.

(x, 63.)

Cimbex americana, Leach, var. laportei, Lepel, x, 65 (C. laportei).
Abia caprifolium, Norton, x, 66.
  cerasi, Fitch, x, 66.
Pristiphora identidem, Norton, x, 69.
  grossulariæ, Walsh, x, 69.
  rufipes, St. Farg., x, 70.
Euura orbitalis, Norton, x, 69.
  salicis-ovum, Walsh, x, 69.
  salicis-gemma, Walsh, x, 69.
  salicicola, Smith, x, 69.
Nematus ventricosus, Klug, x, 68; xi, 46.
  ventralis, Say, x, 68.
  salicis-pisum, Walsh, x, 68.
  trilineatus, Norton, x, 68.
  salicis-pomum, Walsh, x, 68.
Emphytus maculatus, Norton, vii, 111; x, 68.
Dolerus arvensis, Say, x, 67.
Selandria rubi, Harr., vi, 61; x, 67.
  tiliæ, Norton, x, 67.
  cerasi, Peck, x, 67; xii, 98.
  rosæ, Harr., ii, 79; x, 66.
  caryæ, Norton, x, 66.
  juglandis, Fitch, x, 67.
Lophyrus abbotti, Leach, x, 70.

UROCERIDÆ.

(x, 70.)

Urocerus albicornis, Fabr., x, 71.
  abdominalis, Harr., x, 71.
Tremex columba, Linn., vi, 41; x, 71.

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*The names used in the following list, are those now current. Where these differ from those used in the reports, the latter have been repeated in parenthesis, *after* the page references.

LEPIDOPTERA.

(iv, 25; v, 25; vi, 71; vii, 269; x, 72, 145.)

Rhopaloceres.

(vii, 269.)

PAPILIONIDÆ.

(vii, 135, 269; x, 73.)

- Papilio ajax, Linn., vii. 135; x, 74.
  - philenor, Linn., vii. 136; x, 73, 164.
  - asterias, Fabr., vii. 137; x, 74, 173.
  - troilus, Linn., vii. 138; x, 74.
  - turnus, Linn., vii, 139; x, 74, 173.
  - cresphontes, Cram., vii. 139; x, 75.
- Pierinæ, x, 76.
- Pieris monuste, Linn., ix, 32.
  - beckeri, Edw., ix, 28; 33 (P. protodice, var. beckerii).
  - sisymbrii, Bd., ix, 28, 34.
  - occidentalis, Reak., ix, 28, 34; ix, 29 (P. calyce).
  - protodice, Bd.-Le C., vii, 141; ix, 25, 28, 33; x, 76, 178.
  - napi, Esper, vii, 143 (P. oleracea); ix, 28, 36; ix, 26, 28, 29 (P. oleracea); ix, 28 (P. frigida); ix, 28, 32 (P. venosa); x, 77 (P. oleracea).
  - virginiensis, Edw., ix, 29.
  - rapæ, Linn., vii, 144; ix, 8, 31; ix, 29 (P. yreka); ix, 29 (P. rapæ, var. novangliæ); ix, 32 (P. venosa, var. marginalis); x, 77, 179; xi, 32; xii, 92.
  - brassicæ, Linn., ix, 35.
- Callidryas eubule, Linn., vii, 147; x, 78.
- Colias cæsonia, Stoll, x. 78.
  - eurytheme, Bd., vii, 147; x, 78.
  - philodice, Godt., vii, 147; x, 78.
- Terias nicippe, Cram., vii, 148; x, 79.
  - lisa, Bd.-LeC., vii, 148; x, 79.

NYMPHALIDÆ.

(vii, 148, 269.)

- Danais archippus, Fabr., vii, 149; x, 79, 161.
- Nymphalinæ, x, 80.
- Agraulis vanillæ, Linn., x, 80.
- Argynnis idalia, Dr., vii, 149; x, 81, 162.
  - diana, Cram., vii, 149; x, 81.
  - cybele, Fabr., vii, 150; x, 81.
  - aphrodite, Fabr., vii, 150; x, 81.
  - alcestis, Edw., vii, 150; x, 82.
  - atlantis, Edw., x, 82.
  - egleis, Bd., x, 164.
  - myrina, Cram., x. 82, 161.
  - bellona, Fabr., x, 83, 183.
- Euptoieta claudia, Cram., vii, 150; x, 80.
- Melitæa phæton, Dr., x, 83.
  - baroni, H. Edw., x. 163.
- Phyciodes nycteis, Doubl.-Hew., x. 83 (Melitæa nycteis); x, 162 (P. harrisii); x, 165.
  - tharos, Dr., vii, 131; x, 83 (Melitæa tharos); x, 163.
- Eresia texana, Edw., x, 164.
- Grapta interrogationis, Fabr., vii, 151; x, 84, 164.
  - comma, Harr., vii, 152; x, 84, 163.
  - fuunus, Edw., vii, 152; x, 84.
  - gracilis, Gr., vii, 152.
  - progne, Cram., ii, 59 (Vanessa progne); x, 85.
  - j-album, Bd.-LeC., x, 85.
- Vanessa antiopa, Linn., vii. 153; x, 85, 163.
  - milberti, Godt., x, 85 (Grapta milberti); x, 164.
- Pyrameis atalanta, Linn., vii, 153; x, 86.
  - huntera, Dr., vii. 153; x, 86, 153.
  - cardui, Linn., vii, 154; x, 87, 153.
- Junonia cœnia, Hub., vii, 154 (J. lavinia); x, 87 (J. lavinia).
- Limenitis ursula, Fabr., vii, 154; x, 87, 162.
  - arthemis, Dr., x, 88.
  - disippus, Godt., vii, 154; x, 88, 162.
- Apatura celtis, Bd.-LeC., vii, 155; x, 88.
  - clyton, Bd.-LeC., vii, 155; x, 89.
- Paphia troglodyta, Fabr., vii, 156 (P. andria); x, 89 (P. glycerium).
- Debis portlandia, Fabr., x, 92.
- Neonympha canthus, Bd.-LeC., x, 91.
  - gemma, Hub., x, 91.
  - eurytris, Fabr., vii, 156; x. 90, 184.
  - sosybius, Fabr., x, 91.
- Satyrinæ, x, 90 (Libythea wrongly included.)
- Satyrus alope, Fabr., vii, 156; vii, 156 (S. nephele); x, 92; x, 92, 180 (S. nephele).
- Libythea bachmanni, Kirtl., vii, 157; x, 90.
- Thecla m-album, Bd.-LeC., x, 92.
  - humuli, How., vii, 157; x, 92.
  - acadica, Edw., x, 93.
  - calanus, Hub., x, 93.
  - strigosa, How., vii, 157; x, 92.
  - smilacis, Bd.-LeC., x, 93.
  - pœas, Hub., x, 93.
  - irus, Godt., x, 94.
  - niphon, Hub., x, 94.
  - titus, Fabr., x, 94.
- Chrysophonus thoe, Bd.-LeC., vii, 158; x, 95.
  - hypophyleas, Bd., vii, 158 (C. americana); x, 95 (C. americana.)

LYCÆNIDÆ.

(vii, 157, 270.)

- Lycæna scudderi, Edw., x, 95.
  - pseudargiolus, Bd.-LeC., vii, 158; x, 95; x, 96 (L. neglecta).
  - comyntas, Godt., vii, 158; x, 95.

HESPERIDÆ.

(vii, 159, 270.)

- Ancyloxypha numitor, Fabr., x, 96.
- Pamphila zabulon, Bd.-LeC., x, 197 (Atrytone hobomok.)
  - sassacus, Scudd., vii, 159; x, 97.
  - huron, Edw., vii, 159.

- Pamphila phylæus, Dr., x.96,176.
  - otho, Sm.-Abb., vii,160.
  - peckius, Kirby, vii,160; x,178.
  - mystic, Scudd., x,97.
  - cernes, Bd.-LeC., vii,160.
  - manataaqua, Scudd., vii. 160.
  - metacomet, Harr., vii,161.
  - maculata, Edw., x,176.
  - palatka, Edw., x,153.
  - delaware, Edw., x,96,174.
- Amblyscirtes vialis, Edw., vii,161.
- Pyrgus tessellata, Scudd., vii,161.
- Nisoniades lucilius, Lintn., vii,161 (Thanaos lucilius); x,97.
  - juvenalis, Fabr., vii,162 (Thanaos juvenalis); x,97.
- Pholisora catullus, Fabr., vii,162; x,98.
- Eudamus pylades, Scudd.,x.98 (E.bathyllus.)
  - bathyllus, Sm.-Abb., vii,162.
  - lycidas, Sm.-Abb., vii,162.
  - tityrus, Fabr., vii,163; x,98,153.
  - proteus, Linn., x,184.

Heteroceres.

(vii, 269.)

SPHINGIDÆ.

(vii,163,270; x, 99.)

- Hemaris tenuis, Gr., x.159 (Sesia tenuis).
  - diffinis, Boisd., vii.163 (Sesia diffinis); x,99,160, (S. diffinis).
  - thysbe, Fab., vii,164 (Sesia thysbe); x, 98 (S. thysbe).
- Thyreus abboti, Swains., vii,164; x,100.
- Deilephila chamænerii, Harr., x,159.
  - lineata, Fabr., vii,164; x,100,159.
- Philampelus pandorus, Hubn., vii,165; x, 101,175.
  - achemon, Dr., vii,165; x,101,182.
- Chœrocampa tersa, Linn., x,159.
- Everyx myron, Cram., vii,166 (Darapsa myron); x, 103 (Chœrocampa pampinatrix).
- Ampelophaga versicolor, Harr., x, 158 (Darapsa versicolor).
- Paonias excæcatus, Abb.-Sm., vii, 167 (Smerinthus excæcatus).
- Triptogon modesta, Harr., x.159 (Smerinthus modestus).
- Cressonia juglandis, Sm.-Abb., vii, 167 (Smerinthus juglandis.)
- Ceratomia amyntor, Hub., vii.167; x,102.
- Daremma undulosa, Walk., x, 102 (D. Brontes) 159.
  - catalpæ, Boisd., x.104 (Sphinx catalpæ.)
- Diludia jasminearum, Bd-L. C., x, 103.
- Phlegethontius carolina, Linn., vii, 168, (Macrosila Carolina); x, 103, 158.
  - celeus, Hubn., vii, 169 (Macrosila 5-maculata); x, 104 (M. 5-maculata.)
  - cingulata, Fabr., x, 104, 158, (Macrosila cingulata.)
- Sphinx drupiferarum, Abb.-Sm., x, 104.
  - Kalmiæ, Abb.-Sm., x, 104.
  - chersis, Hubn., x, 105.
  - gordius, Cram , x, 105 (Lethia gordius.)
- Ellema coniferarum, Abb.-Sm., x, 105. (Sphinx coniferarum)
  - bombycoides, Walk., x, 105 (Sphinx harrisii.)
  - pineum, Lintn., x. 105 (Sphinx pineum.)

ÆGERIDÆ.

(vii, 169, 270; x, 106.)

- Melittia ceto, Westw., vi,41(Ægeria cucurbitæ); vii, 173 (Æ. cucurbitæ); x, 107 (Æ. cucurbitæ.)
- Alcathoe caudatum, Harris, vii, 172 (Ægeria caudata); x, 108 (Æ. caudata.)
- Bembecia marginata, Harr., vi, 40 (Ægeria rubi); vii, 175 (Æ. rubi); x, 108 (Æ. rubi.)
- Sciapteron polistiformis, Harr., i,24 (Ægeria polistiformis); vii, 171 (Æ. polistiformis); x, 108 (Æ. polistiformis.)
  - anthracipennis, Boisd., x, 109 (Ægeria anthracipennis.)
- Fatua denudata, Harr., x. 109 (Ægeria asilipennis.)
- Podosesia syringæ, Harr., vii, 174 (Ægeria syringæ); x. 109 (Æ. syringæ.)
- Sannina exitiosa, Say, vi, 38 (Ægeria exitiosa); vii, 169; (Æ. exitiosa); x, 107 (Æ. exitiosa).
- Ægeria pictipes, G. & R., x. 109.
  - pyri, Harr., vi, 40; vii, 170; x, 107.
  - acerni, Clem., vi, 40; vii, 173; x, 108.
  - tipuliformis, Linn., vi, 39; vii, 172; x, 107, 151.
  - tiliæ, Harr., x, 109.

ZYGÆNIDÆ.

(vii, 176, 270; x, 110.)

- Alypia octomaculata, Fabr., vii. 176; x, 110, 172.
- Psychomorpha epimenis, Dr., vii, 177; x, 111, 172.
- Endryas unio, Hubn., vii. 178; x, 111,173.
  - grata, Fabr., vii, 179; x,111,173.
- Scepsis fulvicollis, Hubn., vii, 179 (Ctenucha fulvicollis); x, 171.
- Ctenucha virginica, Chap., x, 170.
- Acoloithus falsarius, Clem., x, 112,
- Harrisina americana, Harr., vii, 179 (Acoloithus americana); x, 112 (A. americana.)

BOMBYCIDÆ.

(vii, 179,271; x,113.)

- Hypoprepia fucosa, Hubn., x, 184.
- Utetheisa bella, Linn., vii,180; x, 113.
- Callimorpha interrupto-marginata, De B. vii 181.
  - lecontei, Boisd., ii,47(C. lecontei, var. fulvicosta) vii, 180 C. fulvicosta); vii, 181; x, 113; (C. fulvicosta); x, 114.

Arctia nais, Dr., vii, 181 (A. phalerata); x, 115, 171 (A. phalerata).
  arge, Dr., vii. 182; x. 115 170.
Pyrrharctia isabella, Abb -Sm., vii, 182; x, 115 (Arctia isabella); x, 169.
Leucarctia acræa, Sm., vii, 79, 183; x, 115 (Arctia acræa); x, 170.
Spilosoma virginica, Fabr., vii, 80, 183; x, 116, 176.
Hyphantria textor, Harr., ii, 18; vii, 111, 185; x, 116.
Euchætes collaris, Fitch, x, 169.
Ecpantheria scribonia, Stoll, vii, 184; x, 116.
Halesidota tessellata, Abb.-Sm., vii, 185; x, 116, 168.
  caryæ, Harr., x, 168.
Orgyia leucosigma, Abb.-Sm., ii, 13; vii, 185; x, 166; xii. 100.
Parorgyia clintonii, G. and R., x, 165,
  parallela, G. and R., x, 166.
Empretia stimulea, Clem.. vii, 187; x, 117.
Limacodes fasciola, H.-S., vii, 187 (L. laticlavia); x, 117 (L. laticlavia).
Thyridopteryx ephemeræformis, Steph., vii. 187; x, 118; xii, 101.
Perophora melsheimerii, Harr., x, 156.
Datana ministra, Dr., iv, 186; vii, 189; x, 119, 167.
  perspicua, G. & R., x, 119.
Edema albifrons, Abb.-Sm., vii, 191; x, 120.
Œdemasia concinna, Abb.-Sm., vii, 190 (Notodonta concinna); x, 119 (N. concinna).
Cœlodasys unicornis, Abb.-Sm., vii, 191 (Notodonta unicornis); x, 120 (N. unicornis); x, 47; x, 181 (N. unicornis).
Actias luna, Linn., vii, 192; x, 124, 178,
Telea polyphemus, Linn., vii, 191; x, 124 (Attacus polyphemus); x, 176.
Philosamia cynthia, Dr., vii, 194 (Samia cynthia); x, 125 (Attacus cynthia).
Callosamia promethea, Dr., vii, 193; x, 125 (Attacus promethea); x, 176.
Platysamia cecropia, Linn., vii, 193 (Samia cecropia); x, 126 (Attacus cecropia); x, 177 (Samia cecropia).
  columbia, Smith, x, 177 (Samia columbia).
Hemileuca maia, Dr., vii, 195 (Eucronia maia); x. 127, 163, (E. maia).
Hyperchiria io, Fabr., vii, 195; x, 127, 169.
Eacles imperialis, Dr., vii, 196; x, 121,
Citheronia regalis, Fabr., vii, 195; x. 122, 162.
Anisota stigma, Fabr., x, 120 (Dryocampa stigma).
  senatoria, Abb.-Sm., vii, 196 (Dryocampa senatoria); x, 120, 161, (D. senatoria).
  virginiensis, Dr., x, 121 (Dryocampa pellucida).
Dryocampa rubicunda, Fabr.. vii, 196; x, 121.
Clisiocampa americana, Harr., vii, 110, 197; x, 122, 155.
  disstria, Hubn., vii, 198 (C. sylvatica); x, 123 (C. sylvatica).
Gastropacha americana, Harr., x, 166.
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    - villosum, Oak Twig-pruner.
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  - Euryomia inda, Indian Cetonian.
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  - Haltica helxines, Small Bronze Flea-beetle.
  - Hibernia tiliaria, Yellow Canker-worm.
  - Hispides.
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  - Hyphantria textor, Fall Web-worm.
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  - Lachnosterna fraterna, Kindred May-beetle.
    - fusca, Dark May-beetle.
    - pilosicollis, Hairy May-beetle.
  - Lachnus dentatus, Spotted Willow-aphis.
  - Lathia gordius.
  - Limenitis disippus, Disippus Butterfly.
  - Lithophane cinerea, Ash-gray pinion.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Lucanus dama, Pinching-beetle.
  - Macrodactylus subspinosus, Rose bug.
  - Melolonthidæ, White Grubs.
  - Mytilaspis conchiformis, Oyster-shell Bark-louse.
  - Œdemasia concinna, Red-humped Prominent.
  - Orgyia leucostigma, White-marked Tussock Moth.
  - Papilio turnus, Turnus Butterfly.
  - Parorgyia parallela.
  - Pempelia hammondi, Apple-leaf Skeletonizer.
  - Phigalia cinctaria.
  - Phoxopteris nubeculana.
  - Phycita nebulo, Apple Leaf-crumpler.
  - Prionus laticollis, Broad-necked Prionus.
  - Saperda candida, Round-headed Apple-tree Borer.
  - Saturnia maia, Buck Moth.
  - Schizoneura lanigera, Woolly Aphis of the Apple-tree.
  - Sciara mali, Apple Midge.
  - Smerinthus excæcatus, Blind-eyed Sphinx.
  - Telea polyphemus, Polyphemus Silk-worm.
  - Tolype velleda, Lappet Moth.
  - Tortrix cinderella, Green Apple Leaf-tyer.
    - malivorana, Lesser Apple-leaf Folder.
  - Tremex columba, Elm-tree Borer.
  - Trypeta pomonella, Apple Maggot-fly.
  - Xyleutes robiniæ, Locust-tree Carpenter Moth.
- Apple of Peru. (See Thorn Apple.)
- Apricot.
  - Ægeria exitiosa, Peach-borer.
  - Conotrachelus nenuphar, Plum Curculio.
- Arbor vitæ.
  - Callosamia promethea, Prometheus Silkworm.
  - Phytoptus thujæ.
- Archangel, Archangelica.
  - Plusia iota.
- Aristolochia serpentaria. (See Virginia Snakeroot.)
- A. sipho. (See Dutchman's Pipe.)
- A. tomentosa.
  - Papilio philenor, Philenor Swallow-tail.
- Ash.
  - Callosamia promethea, Prometheus Silkworm.
  - Clisiocampa sylvatica, Tent Caterpillar of the Forest.
  - Daremma brontes.
  - Diludia jasminearum.
  - Halesidota caryæ.
  - Hyperchiria io, Io Moth.
  - Hyphantria textor, Fall Web-worm.
  - Neoclytus capræ, Ash-tree Borer.
  - Pemphigus fraxinifolii.
  - Xyloryctes satyrus.
- Ash, Black or Water.
  - Pemphigus fraxinifolii.
- Ash, Blue.
  - Pemphigus fraxinifolii.
- Ash, Green.
  - Phytoptus fraxini.
- Ash, White or American.
  - Pemphigus fraxinifolii.
  - Phytoptus, sp.
- Asparagus.
  - Ceramica picta, Zebra Caterpillar.
  - Crioceris asparagi, Asparagus Beetle.
  - Elateridæ, Wire worms.
- Aspen.
  - Limenitis arthemis.
- Aspen, American, Populus tremuloides.
  - Cossus centerensis.
  - Pemphigus populicaulis, Poplar-leaf Gall-louse.
- Aspen, Large-toothed, Populus grandidentata.
  - Aphis populifoliæ, Poplar-leaf Aphis.
- Aster.
  - Aphis middletoni.
  - Ceramica picta, Zebra Caterpillar.
  - Gortyna nitela, Stalk Borer.
  - Phyciodes harrisi.
    - nycteis.
    - tharos, Tharos Butterfly.
  - Saturnia maia, Buck Moth.
- Aster, Double-bristled. Diplopappus umbellatus.
  - Phyciodes harrisi.
- Aster, Wild.
  - Leucania unipuncta, Army worm.
- Azalea.
  - Callosamia promethea, Prometheus Silk-worm.

B

- Balm of Gilead.
  - Ægeria tiliæ.
  - Chaitophorus candicans, Balm of Gilead Plant-louse.
  - Hyperchiria io, Io Moth.
  - Prionus laticollis, Broad-necked Prionus.

- Balm of Gilead.
  - Xyleutes robiniæ, Locust-tree Carpenter Moth.
- Balsam.
  - Hyperchiria io, Io Moth.
- Barberry.
  - Attacus cecropia, Cecropia Silkworm.
  - Callosamia promethea, Prometheus Silkworm.
  - Rhopalosiphum berberidis.
- Barley.
  - Agrotis saucia, Variegated Cutworm.
  - Blissus leucopterus, Chinch bug.
  - Cecidomyia destructor, Hessian fly.
  - Elateridæ, Wire worms.
  - Gelechia cerealella, Angoumois Grain Moth.
  - Siphonophora avenæ, Grain Plant-louse.
- Basswood, Lime-tree, American Linden.
  - Datana ministra, Yellow-necked Apple-tree Caterpillar.
  - Grapta interrogationis, Semicolon Butterfly.
  - Hibernia tilaria, Yellow Canker-worm.
  - Limenitis arthemis.
  - Phytoptus abnormis.
  - Telea polyphemus, Polyphemus Silkworm.
- Bayberry, Myrica.
  - Callosamia promethea, Promethus Silkworm.
- Bean.
  - Agrotis clandestina, W-marked Cutworm.
  - Aphis rumicis, Bean Aphis.
  - Bruchus granarius, Grain Bruchus.
    - obsoletus, Bean Weevil.
  - Ceramica picta, Zebra Caterpillar.
  - Diabrotica longicornis, Corn Root-worm.
  - Elateridæ, Wire-worms.
  - Heliothis armigera, Corn worm.
  - Macrobasis unicolor, Ash-gray Blister-beetle.
  - Spilosoma virginica, Yellow Bear.
  - Thecla humuli, Hop-vine Thecla.
- Bean, Wild, Phaseolus perennis.
  - Eudamus proteus.
  - Lycæna comyntas, Comyntas Butterfly.
- Bedstraw, Galium aparine.
  - Aphis rumicis, Bean Aphis.
- Bedstraw, Galium circæzans.
  - Aphis circæzandis.
- Beech.
  - Actias luna, Luna Silkworm.
  - Chrysobothris femorata, Flat-headed Apple-tree Borer.
  - Dicerca divaricata, Cherry-tree Borer.
  - Phyllaphis fagi, Beech Aphis.
  - Schizoneura fagi, Beech Blight.
    - imbricator, Beech-tree Blight.
- Beet.
  - Elateridæ, Wire worms.
  - Ceramica picta, Zebra Caterpillar.
  - Silpha opaca.
  - Spilosoma virginica, Yellow Bear.
- Bidens chrysanthemoides. (See Bur-marigold.)
- Bilberry.
  - Thecla irus.
- Birch.
  - Actias luna, Luna Silkworm.
  - Callipterus betulæ.
    - betulæcolens.
  - Callosamia promethea, Prometheus Silkworm.
  - Datana ministra, Yellow-necked Apple-tree Caterpillar.
  - Hyperchiria io, Io Moth.
  - Hyphantria textor, Fall Web-worm.
  - Telea polyphemus, Polyphemus Silkworm.
- Birthwort. (See Aristolochia tomentosa.)
- Bitter-sweet.
  - Doryphora 10-lineata, Colorado Potato-beetle.
- Blackberry.
  - Ægeria rubi, Raspberry Root-borer.
  - Agrilus ruficollis, Raspberry Cane Borer.
  - Anomala binotata, Two-spotted Vine-chafer.
  - Psylla rubi, Blackberry Flea-louse.
  - Serica vespertina, Evening Silky Leaf-chafer.
  - Sipha rubifolii.
  - Siphonophora rubi.
- Blackberry, Wild.
  - Loxotænia rosaceana, Greater Leaf-roller
- Black Snakeroot, Cimicifuga racemosa.
  - Lycæna pseudargiolus, Azure-blue Butterfly.
- Blueberry.
  - Telea polyphemus, Polyphemus Silkworm.
  - Thecla irus.
- Box-elder. (See Maple, Ash-leaved.)
- Box-thorn.
  - Doryphora 10-lineata, Colorado Potato-beetle.
- Brassica.
  - Pieris virginiensis.
- Brassica napus.
  - Pieris napi.
- Broccoli.
  - Pieris virginiensis.
- Broom, Sarothamnus scoparius.
  - Siphonophora menthæ.
    - rubi.
- Broom-corn.
  - Blissus leucopterus, Chinch bug.
- Buckeye.
  - Orgyia leucostigma, White-marked Tussock Moth.

Buckwheat.
- Agrotis clandestina, W-marked Cutworm.
- Caloptenus spretus, Rocky Mountain Locust.
- Deilephila lineata, White-lined Sphinx.
- Gastrophysa polygoni.

Bulrush, Typha latifolia.
- Plusia festucæ.

Burdock.
- Ceramica picta, Zebra Caterpillar.
- Loxotænia rosaceana, Greater Leaf-roller.
- Plusia chrysites.
  - iota.
  - precationis, Thistle Plusia.
  - simplex, Celery worm.
- Pyrameis cardui, Thistle Butterfly.
  - huntera, Hunter's Butterfly.
- Pyrrharctia isabella, Hedgehog Caterpillar.

Bur-marigold, Bidens chrysanthemoides.
- Siphonophora rudbeckiæ.

Burning bush, Euonymus atropurpureus.
- Aphis rumicis, Bean Aphis.

Bush Clover, Lespedeza.
- Hyperchiria io, Io Moth.
- Lycæna comyntas, Comyntas Butterfly.

Butterfly Pea, Clitoria mariana.
- Eudamus proteus.

Butternut, White Walnut.
- Citheronia regalis, Royal Walnut Moth.
- Hyphantria textor, Fall Web-worm.
- Selandria juglandis.
- Spilosoma virginica, Yellow Bear.
- Telea polyphemus, Polyphemus Silkworm.

Button-bush, Cephalanthus.
- Aphis cephalanthi, Button-bush Aphis.

C

Cabbage.
- Agrotis annexa, Cabbage Cutworm.
  - clandestina, W-marked Cutworm.
  - c-nigrum, Spotted Cutworm.
  - messoria, Dark-sided Cutworm.
  - saucia, Variegated Cutworm.
- Aphis brassicæ, Cabbage Plant-louse.
- Caloptenus spretus, Rocky Mountain Locust.
- Ceramica picta, Zebra Caterpillar.
- Elateridæ, Wire worms.
- Hadena devastatrix, Glassy Cutworm.
- Ludius brevicornis, Wire worm.
- Mamestra subjuncta, Speckled Cutworm.
- Murgantia histrionica, Harlequin Cabbage bug.
- Orchestris vittata, Striped Flea-beetle.
- Orobena rimosalis, Cabbage Pionea.
- Pieris brassicæ.
  - napi.
  - oleracea, Turnip Butterfly.

Cabbage.
- Pieris protodice, Southern Cabbage Butterfly.
  - rapæ, European Cabbage worm.
  - virginiensis.
- Pionea forficalis, Cabbage-garden Pebble Moth.
  - stramentalis, Black-headed Cabbage worm.
- Plusia brassicæ, Cabbage Plusia.
- Plutella cruciferarum, European Cabbage Web Moth.
- Spilosoma virginica, Yellow Bear.

Canada Thistle. (See Thistle, Canada.)

Capsicum.
- Sitodrepa panicea.

Caraway.
- Papilio asterias, Asterias Butterfly.

Carnation.
- Elateridæ, Wire worms.
- Rhopalosiphum dianthi.

Carrot.
- Elateridæ, Wire worms.
- Papilio asterias, Asterias Butterfly.

Cassia.
- Callidryas eubule, Danewort Butterfly.
- Terias nicippe, Nicippus Butterfly.

Castor-oil Plant, Castor Bean.
- Gortyna nitela, Stalk Borer.

Catalpa.
- Sphinx catalpæ.

Cauliflower.
- Ceramica picta, Zebra Caterpillar.
- Pieris rapæ, European Cabbage-worm.
  - virginiensis.

Cedar.
- Thyridopteryx ephemeræformis, Bag-worm.

Cedar, Red.
- Hylurgus dentatus, Toothed Hylurgus.
- Thecla smilacis.

Celery.
- Papilio asterias, Asterias Butterfly.
- Plusia simplex, Celery worm.

Cephalanthus.
- Callosamia promethea, Prometheus Silkworm.

Checkerberry.
- Cœlodasys unicornis, Unicorn Apple-tree Caterpillar.

Chenopodium. (See Pigweed.)

Cherry.
- Ægeria exitiosa, Peach Borer.
- Agrotis saucia, Variegated Cutworm.
- Anisopteryx autumnata, Fall Canker-worm.
  - vernata, Spring Canker-worm.
- Apatela occidentalis.
- Aphis cerasifoliæ, Cherry-leaf Plant-louse.
- Attacus cecropia, Cecropia Silkworm.
- Chrysobothris femorata, Flat-headed Apple-tree Borer.
- Clisiocampa americana, Apple-tree Tent Caterpillar.

- Clisiocampa sylvatica, Tent Caterpillar of the Forest.
- Conotrachelus nenuphar, Plum Curculio.
- Datana ministra, Yellow-necked Apple-tree Caterpillar.
- Dicerca divaricata, Cherry-tree Borer.
- Epicærus imbricatus, Imbricated Snout-beetle.
- Hyphantria textor, Fall Web-worm.
- Ithycerus noveboracensis, New York Weevil.
- Lachnosterna fraterna, Kindred May-beetle.
  - fusca, Dark May-beetle.
  - pilosicollis, Hairy May-beetle.
- Limenitis ursula, Ursula Butterfly.
- Loxotænia rosaceana, Greater Leaf-roller.
- Macrodactylus subspinosus, Rosebug.
- Myzus cerasi, Cherry-tree Aphis.
- Œdemasia concinna, Red-humped Prominent.
- Papilio turnus, Turnus Butterfly.
- Phycita nebulo, Apple Leaf-crumpler.
- Selandria cerasi, Cherry Slug.
- Tortrix fervidana.

Cherry, Black.
- Clisiocampa americana, Apple-tree Tent Caterpillar.
- Hyphantria textor, Fall Web-worm.

Cherry, Wild.
- Attacus cecropia, Cecropia Silkworm.
- Callosamia promethea, Prometheus Silkworm.
- Papilio turnus, Turnus Butterfly.
- Thecla titus.

Cherry, Wild Black.
- Abia cerasi, Cherry Abia.
- Hyphantria textor, Fall Web-worm.
- Hyperchiria io, Io Moth.
- Lycæna comyntas, Comyntas Butterfly.

Chestnut.
- Apatela americana, American Maple Moth.
  - hamamelis.
- Callipterus castaneæ, Chestnut Gay-Louse.

Choke Cherry.
- Aphis cerasifoliæ, Cherry-leaf Plant-louse.
- Attacus cecropia, Cecropia Silkworm.
- Hyperchiria io, Io Moth.
- Telea polyphemus, Polyphemus Silkworm.
- Tortrix fervidana.

Cimicifuga racemosa. (See Black Snake-root.)

Cineraria, Senecio cineraria.
- Pyrameis cardui, Thistle Butterfly.
  - huntera, Hunter's Butterfly.

Citrus.
- Papilio cresphontes, Cresphontes Butterfly.

Cladosporium.
- Diabrotica longicornis, Corn Root-worm.

Clover.
- Callidryas eubule, Danewort Butterfly.
- Caloptenus femur-rubrum, Red-legged Locust.
- Cecidomyia leguminicola.
- Ceramica picta, Zebra Caterpillar.
- Colaspis brunnea.
- Colias cæsonia.
  - eurytheme, Eurytheme Butterfly.
  - philodice, Philodice Butterfly.
- Cutworms.
- Diabrotica longicornis, Corn Root-worm.
- Drasteria erechtea, Clover Drasteria.
- Elateridæ, Wire worms.
- Hypena scabra.
- Hyperchiria io, Io Moth.
- Hyphantria textor, Fall Web-worm.
- Leucania unipuncta, Army-worm Moth.
- Lycæna comyntas, Comyntas Butterfly.
- Pyralis farinalis, Meal Snout Moth.
- Pyrrharctia isabella, Hedge-hog Caterpillar.
- Terias lisa, Lisa Butterfly.
  - nicippe, Nicippus Butterfly.

Clover, Red.
- Diabrotica 12-punctata.
- Epicærus imbricatus, Imbricated Snout-beetle.

Clover hay.
- Asopia costalis, Clover-hay worm.
- Pyralis farinalis, Meal Snout Moth.

Columbine, Aquilegia canadensis.
- Nisoniades lucilius.

Columbine, Aquilegia.
- Hyalopterus aquilegiæ.

Composite Family, Compositæ.
- Coccinellidæ, Lady-bugs.
- Diabrotica longicornis, Corn Root-worm.
- Harpalus.
- Megilla maculata, Spotted Lady-bug.

Cone-flower, Rudbeckia laciniata.
- Siphonophora rudbeckiæ.

Convolvulus.
- Spilosoma virginica, Yellow Bear.

Convolvulus Family, Convolvulaceæ.
- Cassida bivittata, Two-striped Tortoise-beetle.
  - nigripes, Black-legged Tortoise-beetle.
- Cassidinæ, Tortoise Beetles.
- Coptocycla aurichalcea, Golden Tortoise-beetle.
  - guttata, Mottled Tortoise-beetle.

Coreopsis.
- Acmæodera pulchella.
  - tubulus.

Coreopsis aristosa.
- Siphonophora coreopsidis, Aphis of the Spanish Needle.

- Corn.
  - Achatodes zeæ, Spindle worm.
  - Agrotis ypsilon, Greasy Cutworm.
  - Apatela oblinita, Smeared Dagger.
  - Aphidæ, Plant-lice.
  - Aphis maidis, Corn Plant-louse.
  - Arctia arge, Arge Tiger Moth.
    - phalerata, Harnessed Moth.
  - Blissus leucopterus, Chinch bug.
  - Caloptenus femur-rubrum, Red-legged Locust.
    - spretus, Rocky Mountain Locust.
  - Ceramica picta, Zebra Caterpillar.
  - Diabrotica 12-punctata.
    - longicornis, Corn Root-worm.
  - Elateridæ, Wire worms.
  - Empretia stimulea, Saddle-back Moth.
  - Epicauta pennsylvanica.
    - vittata, Striped Potato-beetle.
  - Gelechia cerealella, Angoumois Grain Moth.
  - Gortyna nitela, Stalk Borer.
    - zeæ.
  - Hadena arctica, Yellow-headed Cutworm.
    - devastatrix, Glassy Cutworm.
  - Heliothis armigera, Corn worm.
  - Hyperchiria io, Io Moth.
  - Iulus impressus, Corn Myriapod.
  - Lachnosterna fraterna, White Grub or Kindred May-beetle.
    - fusca, White Grub or Dark May-beetle.
    - pilosicollis, White Grub or Hairy May-beetle.
  - Laphygma frugiperda, Fall Army-worm.
  - Leucania unipuncta, Army-worm.
  - Leucarctia acræa, Salt-marsh Caterpillar.
  - Lygus lineolaris, Tarnished Plant-bug.
  - Macrodactylus subspinosus, Rose bug.
  - Melolonthidæ, White Grubs.
  - Nephelodes violans, Smooth Cutworm.
  - Omophron.
  - Prodenia commelinæ, Corn Cutworm.
  - Pyralis farinalis, Meal Snout Moth.
  - Sipha maydis, Corn Sipha.
  - Sphenophorus zeæ, Corn Curculio.
  - Spilosoma virginica, Yellow Bear.
  - Zabrus.

- Corn, Sweet.
  - Blissus leucopterus, Chinch bug.
  - Euryomia inda, Indian Cetonian.
  - Heliothis armigera, Corn worm.
  - Spilosoma virginica, Yellow Bear.

- Cornel, Panicled, Cornus paniculata.
  - Aphis cornifoliæ.

- Cotton.
  - Aletia argillacea, Cotton worm.
  - Heliothis armigera, Boll worm.
  - Hyperchiria io, Io Moth.
  - Tetranychus, Red Spider.
  - Thecla pœas.
- Cottonwood.
  - Ægeria asilipennis.
  - Apatela americana, American Maple Moth.
    - lepusculina, Cotton-wood Dagger.
  - Argyrolepia quercifoliana, Oak-leaf Tortrix.
  - Chaitophorus populicola.
  - Pemphigus populicaulis, Poplar-leaf Gall-louse.
    - populi-transversus.
    - pseudobyrsa.
    - vagabundus, Vagabond Gall-louse.
- Cotton-wood, Narrow-leaved, Populus balsamifera, var. angustifolia.
  - Pemphigus populi-monilis.
- Crab-apple.
  - Aspidiotus harrisi, Harris's Bark-louse.
  - Carpocapsa pomonella, Codling Moth.
  - Hyphantria textor, Fall Web-worm.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Parorgyia parallela.
  - Phycita nebulo. Apple Leaf-crumpler.
  - Xyleutes robiniæ, Locust-tree Carpenter Moth.
- Crab-apple, Siberian.
  - Carpocapsa pomonella, Codling Moth.
  - Limenitis ursula, Ursula Butterfly.
  - Loxotænia rosaceana, Greater Leaf-roller.
- Crab-apple, Transcendent.
  - Eccopsis malana, Apple-bud worm.
- Crab-apple. Wild.
  - Anthonomus 4-gibbus, Apple Curculio.
- Cranberry.
  - Pristiphora identidem.
  - Thecla irus.
- Cranberry-tree, Viburnum opulus.
  - Aphis viburni, Snowball Aphis.
- Croton capitatum.
  - Paphia andria, Goatweed Butterfly.
    - glycerium.
- Cruciferæ.
  - Flea beetles.
  - Orchestris vittata, Striped Flea-beetle.
- Cucumber.
  - Aphis cucumeris, Melon plant-louse.
  - Diabrotica 12-punctata.
    - longicornis, Corn Root-worm,
    - vittata, Striped Cucumber-beetle.
  - Epitrix cucumeris, Cucumber Flea-beetle.
  - Melittia cucurbitæ, Squash Borer.
  - Phacellura nitidalis, Pickle-worm.
  - Polydesmus complanatus, Flattened Centipede.
  - Psylliodes punctulata, Punctulated Flea-beetle.
- Cucumber, Wild.
  - Aphis, Plant-louse.
- Cucurbitaceæ. (See Gourd family.)
- Cud-weed, Gnaphalium.
  - Pyrameis huntera, Hunter's Butterfly.

- Cup-plant, Silphium integrifolium.
  - Siphonophora rudbeckiæ.
- Currant.
  - Ægeria tipuliformis, Currant Borer.
  - Agrotis clandestina, W-marked Cutworm.
  - Angerona crocataria.
  - Attacus cecropia, Cecropia Silkworm.
  - Caloptenus femur-rubrum, Red-legged Locust.
  - Capsus quadrivittatus, Four-striped Plant-bug.
  - Cutworms.
  - Doryphora 10-lineata, Colorado Potato-beetle.
  - Eufitchia ribearia, Gooseberry Spanworm.
  - Eupithecia interrupto-fasciata, Currant Fruit-worm.
  - Gortyna nitela, Stalk Borer.
  - Grapta progne, Spinous Currant Caterpillar.
  - Hyperchiria io, Io Moth.
  - Myelois convolutella, Gooseberry-worm.
  - Mytilaspis conchiformis, Oyster-shell Bark-louse.
  - Nematocampa filamentaria, Strawberry Geometer.
  - Nematus ventricosus, Imported Currant worm.
  - Pristiphora grossulariæ.
    - rufipes.
  - Spilosoma virginica, Yellow Bear.
  - Tetranychus, Red Spider.
- Currant, Black.
  - Ægeria caudata, Black-currant Borer.
    - tipuliformis, Currant Borer.
- Currant, Red.
  - Ægeria tipuliformis, Currant Borer.
  - Attacus cecropia, Cecropia Silkworm.
  - Doryphora 10-lineata, Colorado Potato-beetle.
  - Eupithecia interrupto-fasciata, Currant Fruit-worm.
  - Myzus ribis.
- Currant, Wild.
  - Grapta progne, Spinous Currant Caterpillar.
- Currant, Wild Black.
  - Ægeria caudata, Black-currant Borer.
- Cypress Vine.
  - Agrotis ypsilon, Greasy Cutworm.

D

- Dandelion.
  - Pyrrarctia isabella, Hedgehog Caterpillar.
- Decayed Oak wood.
  - Mordella 8-punctata.
- Decayed Wood.
  - Alaus oculatus, Snapping Beetle.
- Decayed Wood.
  - Dendroides canadensis.
  - Dynastes tityus.
  - Lucanus dama, Pinching bug.
    - elaphus, Stag Beetle.
- Decaying Vegetation.
  - Diabrotica longicornis, Corn Root-worm.
  - Myriapoda, Myriapods, Thousand-legs.
- Dictamnus fraxinella.
  - Papilio cresphontes, Cresphontes Butterfly.
- Dill.
  - Papilio asterias, Asterias Butterfly.
- Diplopappus. (See Aster, Double-bristled.)
- Dock.
  - Aphis rumicis. Bean Aphis.
- Dock, Yellow.
  - Ceramica picta, Zebra Caterpillar.
  - Exartema fascianatum.
- Dogbane, Apocynum.
  - Aphis apocyni.
- Dogbane, Spreading. (Apocynum androsæmifolium.)
  - Chrysochus auratus, Golden Chryschus.
  - Danais archippus, Archippus Butterfly.
  - Euchætes collaris.
- Dog-fennel. (See May-weed.)
- Dogwood, Cornus.
  - Aphis cornifoliæ, Dogwood-leaf Aphis.
  - Cœlodasys unicornis, Unicorn Apple-tree Caterpillar.
  - Hyperchiria io, Io Moth.
  - Œdemasia concinna, Red-humped Prominent.
  - Lycæna pseudargiolus, Azure-blue Butterfly.
- Dogwood. Cornus paniculata.
  - Loxotænia rosaceana. Greater Leaf-Roller.
- Dogwood, Flowering, Cornus florida.
  - Aphis cornifoliæ.
- Dogwood, Red-osier.
  - Schizoneura cornicola.
- Drummond Phlox.
  - Heliothis phloxiphagus, Phlox Heliothis.
- Dutchman's Pipe, Aristolochia sipho.
  - Papilio philenor, Philenor Swallow-tail.
- Dyer's Broom, Genista.
  - Aphis rumicis, Bean Aphis.

E

- Egg Plant.
  - Doryphora 10-lineata, Colorado Potato-beetle.
- Elder.
  - Aphis sambuci, Elder Aphis.
  - Attacus cecropia, Cecropia Silkworm.
  - Hyphantria textor, Fall Web-worm.
  - Macrodactylus subspinosus, Rose bug.

Elm.
- Anisopteryx autumnata, Fall Canker-worm.
  - vernata. Spring Canker-worm.
- Apatela americana, American Maple Moth.
- Arctia phalerata, Harnessed Moth.
- Callipterus ulmicola.
- Ceratomia amyntor, Elm Sphinx.
- Cimbex laportei.
- Eugonia subsignaria.
- Glyphina ulmicola, Aphis of the Elm-leaf Cockscomb Gall.
- Grapta comma, Comma Butterfly.
  - interrogationis, Semicolon Butterfly.
  - progne, Spinous Currant Caterpillar.
- Halesidota caryæ.
- Hibernia tiliaria, Yellow Canker-worm.
- Hyperchiria io, Io Moth.
- Hyphantria textor, Fall Web-worm.
- Lachnosterna fraterna, Kindred May-beetle.
  - fusca, Dark May-beetle.
  - pilosicollis, Hairy May-beetle.
- Magdalis armicollis, Elm-tree Curculio.
- Mytilaspis conchiformis, Oyster-shell Bark-louse.
- Orgyia leucostigma, White-marked Tussock Moth.
- Phigalia strigataria.
- Saperda tridentata, Three-toothed Saperda.
- Schizoneura americana.
  - rileyi, Woolly Aphis of the Elm-tree.
  - ulmi, Elm-leaf Aphis.
- Semasia prunivora, Plum Moth.
- Telea polyphemus, Polyphemus Silk-worm.
- Tolype velleda, Velleda Lappet Moth.
- Tremex columba, Pigeon Tremex.
- Vanessa antiopa, Antiopa Butterfly.

Elm, American or White.
- Callipterus ulmifolii.
- Ceratomia amyntor, Elm Sphinx.
- Grapta interrogationis, Semicolon Butterfly.
  - progne, Spinous Currant Caterpillar.
- Phytoptus ulmi.

Elm, Red or Slippery.
- Pemphigus ulmifusus. (Red-elm Gall-louse.)

Endive, Cichorium endivia.
- Tychea erigeronensis.

Euonymus atropurpureus. (See Burning bush.)

Eupatorium.
- Gortyna nitela, Stalk Borer.

F

False Indigo, Amorpha and Baptisia.
- Hyperchiria io, Io Moth.

False Nettle, Bœhmeria cylindrica.
- Graptå comma, Comma Butterfly.
- Pyrameis atalanta, Atalanta Butterfly.

False Sycamore, Acer pseudo-platanus.
- Drepanosiphum acerina.

Feverwort, Triosteum perfoliatum.
- Sesia diffinis, Clear Wing.

Field Crops.
- Agrotis clandestina, W-marked Cut-worm.
  - messoria, Dark-sided Cutworm.
  - saucia, Variegated Cutworm.
- Elateridæ, Wire worms.

Figwort, Scrophularia nodosa.
- Phorodon scrophulariæ.

Fir.
- Hylotrupes bajalus.
- Lophyrus abietis, Fir-tree Saw-fly.

Flax.
- Leucania unipuncta, Army worm.

Fleabane, Canada, Erigeron canadense.
- Siphonophora erigeronensis, Aphis of the Canada Fleabane.

Flowers.
- Cistelidæ.
- Eupithecia interrupto-fasciata, Currant Fruit-worm.
- Gortyna nitela, Stalk Borer.
- Mordellidæ.
- Rhipiphoridæ.
- Trachelides.

Flowers, Garden.
- Agrotis messoria, Dark-sided Cutworm.
- Caloptenus bivittatus, Striped Caloptenus.
- Elateridæ, Wire worms.
- Gortyna nitela, Stalk Borer.
- Leucarctia acræa, Salt-marsh Caterpillar.
- Mamestra renigera, White Bristly Cut-worm.

Forest Trees.
- Anisopteryx autumnata, Fall Canker-worm.
  - vernata, Spring Canker-worm.
- Apatela americana, American Maple Moth.
  - lepusculina, Cottonwood Dagger.
  - oblinita, Smeared Dagger.
- Apatura celtis, Eyed Emperor.
  - clyton, Tawny Emperor.
- Argyrolepia quercifoliana, Oak-leaf Tortrix.
- Attacus cecropia, Cecropia Silkworm.
- Bostrichus.
- Callosamia promethea, Prometheus Silkworm.
- Catocala amatrix.
  - cara.
  - desperata.
  - neogama.
  - ultronia.
- Ceratomia amyntor, Elm Sphinx.
- Chrysophanus thoë, Thoë Butterfly.

Forest Trees.
  Citheronia regalis, Royal Walnut Moth.
  Clisiocampa americana, Apple-tree Tent Caterpillar.
    sylvatica, Tent Caterpillar of the Forest.
  Cressonia juglandis, Walnut Sphinx.
  Dryocampa rubicunda, Green-striped Maple Worm.
    senatoria, Senatorial Dryocampa.
  Ecpantheria scribonia, Large Black Bear.
  Endropia bilinearia.
  Eucronia maia, Buck Moth.
  Eugonia subsignaria.
  Grapta comma, Comma Butterfly.
    interrogationis, Semicolon Butterfly.
  Halesidota tessellaris, Checkered Tussock Moth.
  Hyperchiria io, Io Moth.
  Hyphantria textor, Fall Web-worm.
  Limenitis ursula, Ursula Butterfly.
  Lithophane cinerea, Ash-gray Pinion.
  Macrodactylus subspinosus, Rose bug.
  Orgyia leucostigma, White-marked Tussock Moth.
  Papilio ajax, Ajax Butterfly.
    cresphontes, Philenor Swallow-tail.
    troilus, Troilus Butterfly.
    turnus, Turnus Butterfly.
  Phycita nebulo, Apple Leaf-crumpler.
  Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
Fringe tree, Virginia, Chionanthus.
  Sphinx kalmiæ.
Fruit.
  Euryomia inda, Indian Cetonian.
Fruit trees.
  Ægeria exitiosa, Peach Borer.
  Agrotis, Cutworms.
    messoria, Dark-sided Cut-worm.
  Aphidæ, Plant Lice.
  Borers.
  Bostrichus.
    basilaris, Shagbark Hickory-tree Borer.
  Carpocapsa pomonella, Codling Moth.
  Cercopidæ and Fulgoridæ, Tree-hoppers and leaf-hoppers.
  Chrysobothris femorata, Flat-headed Apple-tree Borer.
  Clisiocampa americana, Apple-tree Tent Caterpillar.
  Coccidæ, Bark Lice.
  Elateridæ, Wire-worms.
  Empretia stimulea, Saddle-back Moth.
  Hyphantria textor, Fall Web-worm.
  Lachnosterna, May-beetles.
    fraterna, Kindred May-beetle.
    fusca, Dark May-beetle.
    pilosicollis, Hairy May-beetle.
  Leucania unipuncta, Army-worm.
Fruit trees.
  Limenitis ursula, Ursula Butterfly.
  Lygus lineolaris, Tarnished Plant-bug.
  Orgyia leucostigma, White-marked Tussock Moth.
  Pempelia hammondi, Apple-leaf Skeletonizer.
  Phycita nebulo, Apple Leaf-crumpler.
  Psylla rubi, Blackberry Flea-louse.
  Psyllidæ, Jumping Plant-lice.
  Saperda candida, Round-headed Apple-tree Borer.
  Schizoneura lanigera, Woolly Aphis of the Apple-tree.
  Thyridopteryx ephemeræformis, Bag-worm.
  Tortrix malivorana, Lesser Apple-leaf Folder.
Fungus.
  Agonoderus.
  Amara.
  Carabidæ, Predaceous Ground-beetles.
  Chlænius.
  Coccinella 9-notata, Nine-spotted Lady-bug.
    5-notata.
  Coccinellidæ, Lady bugs.
  Cycloneda sanguinea Trim Lady-bug.
  Evarthrus colossus.
  Harpalus.
  Hippodamia convergens, Convergent Lady-bird.
    glacialis, Icy Lady-bug.
  Megilla maculata, Spotted Lady-bug.
  Myriapoda, Myriapods, Thousand-legs.
  Pterostichus.
  Schizoneura fungicola.

G

Galium. (See Bedstraw.)
Gerardia tenuifolia.
  Junonia lavinia, Lavinia Butterfly.
  Siphonophora gerardiæ.
German Ivy.
  Rhopalosiphum dianthi.
Gladiolus.
  Heliothis armigera, Corn worm.
Glycine. (See Grount Ant.
Golden Rod.
  Chauliognathus.
  Diabrotica longicornis, Corn Root-worm.
  Euryomia inda, Indian Cetonian.
  Siphonophora rudbeckiæ.
Golden-rod, Solidago rigida.
  Siphonophora rudbeckiæ.
Golden-rod, Solidago serotina.
  Siphonophora rudbeckiæ.
Gooseberry.
  Ægeria tipuliformis, Currant Borer.
  Agrotis clandestina, W-marked Cut-worm.

- Gooseberry.
  - Caloptenus femur-rubrum, Red-legged Locust.
  - Cutworms.
  - Epicærus imbricatus, Imbricated Snout-beetle.
  - Eufitchia ribearia, Gooseberry Span-worm.
  - Grapta faunus.
  - Limenitis ursula, Ursula Butterfly.
  - Myelois convolutella, Gooseberry worm.
  - Myzus ribis.
  - Nematus ventricosus, Imported Currant worm.
  - Pristiphora grossulariæ.
    - rufipes.
  - Siphonophora lactucæ.
  - Spilosoma virginica, Yellow Bear.
- Gooseberry, Wild.
  - Grapta progne, Spinous Currant Caterpillar.
- Goosefoot Family, Chenopodiaceæ.
  - Aphis atriplicis.
- Gourd family, Cucurbitaceæ.
  - Aphis cucumeris, Melon Plant-louse.
- Grain.
  - Alucita, Grain Moths.
  - Blissus leucopterus, Chinch bug.
  - Bruchus granarius, Grain Bruchus.
  - Gelechia cerealella, Angoumois Grain Moth.
  - Gortyna nitela, Stalk Borer.
  - Leucania unipuncta, Army worm.
  - Leucarctia acræa, Salt-marsh Caterpillar.
  - Macrodactylus subspinosus, Rose bug.
  - Philometra serraticornis.
  - Tenebrio, Meal worms.
  - Tenebrioides mauritanica.
  - Tinea granella, Wolf Moth.
- Grape.
  - Acoloithus americana, American Procris.
    - falsarius.
  - Ægeria polistiformis, Grape Root-borer.
  - Agrotis cupida.
    - saucia, Variegated Cutworm.
    - scandens, Climbing Cutworm.
    - ypsilon, Greasy Cutworm.
  - Alypia octomaculata, Eight-spotted Forester.
  - Amphicerus bicaudatus, Twig and Axil Borer.
  - Amphipyra pyramidoides, Green Cream-spotted Grape worm.
  - Anomala binotata, Two-spotted Vine-chafer.
    - lucicola, American Vine-chafer.
    - varians, Variable Vine-chafer.
    - vitis, Vine-chafer.
  - Apatela oblinita, Smeared Dagger.
  - Arctia phalerata, Harnessed Moth.
- Grape.
  - Bostrichus basilaris, Shagbark Hickory-tree Borer.
  - Callidium amœnum.
  - Chœrocampa pampinatrix.
  - Cœliodes inæqualis, Grape Curculio.
  - Colaspis flavida, Grape-vine Colaspis.
  - Dactylosphæra vitifoliæ, Grape-leaf Gall-louse.
  - Darapsa myron, Hog Caterpillar of the Vine.
  - Daremma unculosa.
  - Deilephila chamænerii.
    - lineata, White-lined Sphinx.
  - Desmia maculata, Grape Leaf-folder.
  - Dyspteris abortivaria.
  - Elateridæ, Wire worms.
  - Eudryas grapta, Beautiful Wood-nymph.
    - unio, Pearly Wood-nymph.
  - Fidia viticida, Grape-vine Fidia.
  - Gall-making Aphides.
  - Graptodera chalybea, Grape-vine Flea-beetle.
  - Hyphantria textor, Fall Web-worm.
  - Lecanium vitis.
  - Macrodactylus subspinosus, Rose-bug.
  - Mamestra distincta.
  - Pelidnota punctata, Spotted Vine-chafer.
  - Penthina vitivorana, Grape-berry Moth.
  - Petrophora diversilineata.
  - Philampelus achemon, Achemon Sphinx.
    - pandorus, Satellite Sphinx.
  - Philometra serraticornis.
  - Phylloxera vitifoliæ, Grape Phylloxera.
  - Prionus imbricornis, Tile-horned Prionus.
    - laticollis, Broad-necked Prionus.
  - Psychomorpha epimenis, Grape-vine Epimenis.
  - Pterophorus periscelidactylus, Grape-vine Plume.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Rutelidæ, Vine Chafers.
  - Sciara inconstans, Fickle Midge.
  - Selandria vitis.
  - Siphonophora viticola, Grape Louse.
  - Spilosoma virginica, Yellow Bear.
  - Tetranychus, Red Spider.
  - Thyreus abbotti, Abbott's Sphinx.
- Grass.
  - Acridium americanum, American Locust.
    - var. ambiguum, American Locust, yellow var.
  - Agonoderus.
  - Agrotis, Cutworms.
    - c-nigrum, Spotted Cutworms.
    - saucia, Variegated Cutworm.
    - tessellata, Corn Cutworm.

- Grass.
  - Amara.
  - Anisodactylus.
  - Arctia phalerata, Harnessed Moth.
  - Atrytone hobomok.
  - Blissus leucopterus, Chinch bug.
  - Byrrhus pilula.
  - Calathus gregarius.
  - Caloptenus bivittatus, Striped Caloptenus.
    - differentialis, Lubberly Caloptenus.
    - femur-rubrum, Red-legged Locust.
    - spretus, Rocky Mountain Locust.
  - Carabidæ, Predaceous Ground-beetles.
  - Chytolita morbidalis.
  - Coccinellidæ, Lady bugs.
  - Ctenucha virginica.
  - Debis portlandia.
  - Drasteria erechtea.
  - Elateridæ, Wire worms.
  - Galerita janus, Janus Ground-beetle.
  - Gortyna nitela, Stalk Borer.
  - Hadena devastatrix, Glassy Cutworm.
  - Harpalus.
  - Heliophila phragmitidicola.
  - Isosoma elymi, Wheat-straw Worm.
  - Lachnosterna fraterna, White Grub or Kindred May-beetle.
    - fusca, White Grub or Dark May-beetle.
    - pilosicollis, White Grub or Hairy May-beetle.
  - Laphygma frugiperda, Fall Army-worm.
  - Leucania pseudargyia.
    - unipuncta, Army worm.
  - Leucarctia acræa, Salt-marsh Caterpillar.
  - Macrodactylus subspinosus, Rose bug.
  - Megilla maculata, Spotted Lady-bug.
  - Melolonthidæ, White Grubs.
  - Neonympha canthus.
    - eurytris, Eurytris Butterfly.
    - gemma.
    - sosybius.
  - Nephelodes violans, Smooth Cutworm.
  - Pamphila mystic.
    - peckius, Peck's Skipper.
    - phylæus.
    - sassacus, Sassacus Skipper.
  - Patrobus longicornis.
  - Philometra serraticornis.
  - Platynus limbatus.
  - Plusia simplex, Celery worm.
  - Pseudoglossa lubricalis.
  - Pterostichus.
  - Satyrus alope, Alope Butterfly.
    - nephele, Nephele Butterfly.
  - Scepsis fulvicollis.
  - Schizoneura panicola.
- Grass, Blue.
  - Caloptenus spretus, Rocky Mountain Locust.
  - Loxopeza atriventris.
- Grass, Bottle. (See Grass, Foxtail.)
- Grass, Crab, Panicum sanguinale.
  - Blissus leucopterus, Chinch bug.
- Grass, Eragrostis poæoides, var. megastachya.
  - Glyphina eragrostidis.
- Grass, Foxtail, Setaria.
  - Blissus leucopterus.
- Grass, Foxtail, Bottle-grass, Setaria glauca.
  - Siphonophora setariæ.
- Grass, Gymnostichum hystrix.
  - Isosoma hordei, Joint worm.
- Grass, Herd's. (See Grass, Timothy.)
- Grass, Hungarian.
  - Agrotis c-nigrum, Spotted Cutworm.
  - Blissus leucopterus, Chinch bug.
  - Leucania unipuncta, Army worm.
- Grass, Lyme, Wild Rye, Elymus canadensis.
  - Isosoma hordei, Joint-worm.
- Grass, Panicum.
  - Glyphina eragrostidis.
  - Siphonophora setariæ, Bottle-grass Aphis.
- Grass, Panicum glabrum.
  - Schizoneura panicola.
  - Tychea panici.
- Grass, Poa annua.
  - Rhizobius poæ.
- Grass, Ray or Rye.
  - Elateridæ, Wire worms.
- Grass, Timothy, Herd's grass.
  - Blissus leucopterus, Chinch bug.
  - Caloptenus spretus, Rocky Mountain Locust.
  - Cut worms.
  - Elateridæ, Wire worms.
  - Leucania unipuncta, Army worm.
  - Timothy Worms.
- Grass, Woolly Beard, Erianthus alopecuroides.
  - Pamphila delaware.
- Grasses, perennial.
  - Agrotis, Cutworms.
  - Elateridæ, Wire worms.
  - Lachnosterna, White Grubs.
  - Leaf-hoppers.
  - Leucania unipuncta, Army worm.
- Grasses, Wild.
  - Blissus leucopterus, Chinch bug.
- Ground Cherry, Physalis.
  - Doryphora 10-lineata, Colorado Potato-beetle.
- Ground Cherry, Physalis pubescens.
  - Macrosila carolina, Tobacco worm.
- Ground nut, Apios Glycine.
  - Eudamus bathyllus, Bathyllus Skipper.
  - Niscniades juvenalis.

H

- Hackberry, Celtis.
  - Apatela rubricoma.
  - Apatura celtis, Eyed Emperor.
    - clyton, Tawny Emperor.
  - Libythea bachmanni.

- Hackberry, Celtis occidentalis.
  - Sphinx drupiferarum.
- Haw.
  - Conotrachelus cratægi, Quince Curculio.
- Hawthorn. (See Thorn.)
- Hay.
  - Blissus leucopterus, Chinch bug.
- Hazel.
  - Apatela oblinita, Smeared Dagger.
  - Argyrolepia quercifoliana, Oak-leaf Tortrix.
  - Balaninus nasicus, Long-snouted Nut-weevil.
  - Chytolita morbidalis.
  - Cœlodasys unicornis, Unicorn Apple-tree Caterpillar.
  - Datana ministra, Yellow-necked Apple-tree Caterpillar.
  - Halesidota tessellaris, Checkered Tussock Moth.
  - Hibernia tiliara, Yellow Canker-worm.
  - Hyperchiria io, Io Moth.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Nematocampa filamentaria, Strawberry Geometer.
  - Telea polyphemus, Polyphemus Silk-worm.
- Hedysarum.
  - Eudamus bathyllus, Bathyllus Skipper.
- Helminthosporium.
  - Carabidæ, Predaceous Ground-beetles.
  - Coccinella 9-notata, Nine-spotted Lady-bug.
    - 5-notata.
  - Diabrotica longicornis, Corn Root-worm.
- Hemlock.
  - Hylotrupes bajulus.
- Hemlock Lumber.
  - Callidium sp.
- Hemp.
  - Acridium emarginatum, Emarginate Locust.
  - Heliothis armigera, Corn worm.
  - Plusia aurichalcea.
- Henbane.
  - Doryphora 10-lineata, Colorado Potato-beetle.
- Heuchera. (See Alum-root.)
- Hibiscus.
  - Eudryas unio, Pearly Wood-nymph.
- Hibiscus grandiflorus.
  - Amphalocera.
  - Heliothis armigera, Corn worm.
- Hickory.
  - Actias luna, Luna Silkworm.
  - Amphicerus bicaudatus, Twig and Axil Borer.
  - Aphis caryella.
  - Bostrichus basilaris, Shagbark Hickory-tree Borer.
  - Callipterus caryæ.
  - Chion cinctus, Hickory Trunk Borer.
- Hickory.
  - Chrysobothris femorata, Flat-headed Apple-tree Borer.
  - Citheronia regalis, Royal Walnut Moth.
  - Clisiocampa sylvatica, Tent Caterpillar of the Forest.
  - Cressonia juglandis, Walnut Sphinx.
  - Datana ministra, Yellow-necked Apple-tree Caterpillar.
  - Dicerca lurida.
  - Halesidota caryæ.
  - Hyphantria textor, Fall Web-worm.
  - Lachnus, Twig Lice.
    - caryæ, Hickory Plant-louse.
  - Lithophane cinerea, Ash-gray Pinion.
  - Nematocampa filamentaria, Strawberry Geometer.
  - Phycita juglandis, Walnut Leaf-crumpler.
  - Phylloxera caryæcaulis, Hickory Gall-aphis.
    - caryæ-globosa.
    - caryævenæ,. Hickory-vein Gall-louse.
  - Ptinidæ.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Schizoneura caryæ, Hickory Blight.
  - Scolytus 4-spinosus, Hickory Bark-borer.
  - Selandria caryæ.
  - Telea polyphemus, Polyphemus Silk-worm.
  - Thecla calanus.
  - Tortrix rileyana, Walnut Tortrix.
- Hickory, Bitter-nut.
  - Scolytus 4-spinosus, Hickory Bark-borer.
- Hickory, Pignut.
  - Hyphantria textor, Fall Web-worm.
  - Ithycerus noveboracensis, New York Weevil.
  - Lachnus caryæ, Hickory Plant-louse.
  - Scolytus 4-spinosus, Hickory Bark-borer.
- Hickory, Shagbark or Shell-bark.
  - Bostrichus basilaris, Shagbark Hickory-tree Borer.
  - Hyphantria textor, Fall Web-worm.
  - Phylloxera caryæfoliæ, Hickory Leaf-witherer.
  - Scolytus 4-spinosus, Hickory Bark-borer.
- Holly.
  - Thecla strigosa, Streaked Thecla.
- Hollyhock.
  - Plusia precationis, Thistle Plusia.
  - Pyrameis cardui, Thistle Butterfly.
    - huntera, Hunter's Butterfly.
- Honey-locust.
  - Eburia quadrigeminata, Honey-locust Borer.
  - Macrobasis unicolor, Ash-gray Blister-beetle.

- Honey-locust.
  - Telea polyphemus, Polyphemus Silkworm.
- Honeysuckle.
  - Ceramica picta, Zebra Caterpillar.
  - Chaitophorus lonicera.
- Honeysuckle, Bush.
  - Sesia diffinis, Clear Wing.
- Honeysuckle, Fly, Lonicera ciliata.
  - Melitæa phæton.
- Honeysuckle, Tartarian.
  - Abia caprifolii.
  - Sesia diffinis, Clear Wing.
- Hop.
  - Elateridæ, Wire-worms.
  - Grapta comma, Comma Butterfly.
    - interrogationis, Semicolon Butterfly.
  - Hypena evanidalis.
    - humuli, Hop-vine Moth.
  - Hyperchiria io, Io Moth.
  - Phorodon humuli, Hop Aphis.
  - Plusia balluca, Hop Plusia.
  - Pyrameis atalanta, Atalanta Butterfly.
  - Tetranychus, Red Spider.
  - Thecla humuli, Hop-vine Thecla.
- Hop Tree, Ptelea trifoliata.
  - Papilio cresphontes, Cresphontes Butterfly.
- Hornbeam, Carpinus.
  - Psylla carpini.
- Horse-chestnut.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Orgyia leucostigma, White-marked Tussock Moth.
  - Parorgyia parallela.
- Horsemint, Monarda.
  - Pholisora catullus.
- Horse Nettle.
  - Doryphora 10-lineata, Colorado Potato-beetle.
    - juncta.
- Horseradish.
  - Caloptenus bivittatus, Striped Caloptenus.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Pieris oleracea, Turnip Butterfly.
    - rapæ, European Cabbage worm.
    - virginiensis.

I

- Indian Hemp, Apocynum cannabinum.
  - Botis penitalis.
  - Euchætes collaris.
- Indian Plantain, Cacalia suaveolens.
  - Siphonophora rudbeckiæ.
- Iris.
  - Elateridæ, Wire worms.
- Ironweed, Vernonia fasciculata.
  - Aphis middletoni.
    - vernoniæ, Ironweed Aphis.
- Ironweed, Vernonia noveboracensis.
  - Siphonophora rudbeckiæ.
- Ironweed, Vernonia lindheimeriana.
  - Siphonophora rudbeckiæ.
- Ivy, American. (See American Ivy.)
  - German. (See German Ivy.)

K

- Knotweed.
  - Chrysophanus thoë, Thoë Butterfly.
  - Doryphora 10-lineata, Colorado Potato-beetle.
  - Gastrophysa polygoni.
  - Gortyna nitela, Stalk Borer.
  - Siphonophora polygoni, Knotweed Aphis.

L

- Lamb's-quarters, Chenopodium album.
  - Ceramica picta, Zebra Caterpillar.
  - Diabrotica longicornis, Corn Root-worm.
  - Doryphora 10-lineata, Colorado Potato-beetle.
- Larch.
  - Orgyia leucostigma, White-marked Tussock Moth.
- Larch, American, Tamarack.
  - Chermes laricifoliæ, Larch Chermes.
  - Lachnus laricifex, Tamarack Aphis.
  - Samia columbia.
- Laurel, Kalmia.
  - Sphinx kalmiæ.
- Leguminosæ. (See Pulse Family.)
- Lemon.
  - Papilio cresphontes, Cresphontes Butterfly.
- Lettuce.
  - Agrotis c-nigrum, Spotted Cutworm.
  - Caloptenus spretus, Rocky Mountain Locust.
  - Elateridæ, Wire worms.
  - Plusia simplex, Celery worm.
  - Rhizobius lactucæ, Lettuce Earth-louse.
  - Siphonophora lactucæ.
- Lichen.
  - Coccinella 9-notata, Nine-spotted Lady-bug.
    - 5-notata.
    - sanguinea, Trim Lady-bug.
  - Coccinellidæ, Lady bugs.
  - Diabrotica longicornis, Corn Root-worm.
  - Hippodamia convergens, Convergent Lady-bug.
    - glacialis, Icy Lady-bug.
  - Megilla maculata, Spotted Lady-bug.
- Lilac.
  - Ægeria syringæ, Lilac Borer.
  - Callosamia promethea, Prometheus Silkworm.

- Lilac.
  - Daremma undulosa.
  - Loxotænia rosaceana, Greater Leaf-Roller.
  - Mytilaspis conchiformis, Oyster-shell Bark-louse.
  - Papilio troilus, Troilus Butterfly.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Sphinx chersis.
  - Spilosoma virginica, Yellow Bear.
- Lily.
  - Gortyna nitela, Stalk Borer.
- Lime-tree. (See Basswood.)
- Linden.
  - Apatela americana, American Maple Moth.
  - Drepanosiphum tiliæ.
  - Lachnus longistigma.
  - Phytoptus.
  - Selandria tiliæ, Linden Saw-fly.
- Linden, American. (See Basswood.)
- Linden, European.
  - Saperda vestita, Hairy Saperda.
  - Tetranychus, Red Spider.
- Lindera. (See Spice-bush.)
- Liquidambar. (See Sweet-gum Tree.)
- Lobelia.
  - Elateridæ, Wire worms.
- Locust.
  - Attacus cecropia, Cecropia Silkworm.
  - Cyllene robiniæ, Locust Borer.
  - Eudamus tityrus, Tityrus Skipper.
  - Hispides.
  - Hyperchiria io, Io Moth.
  - Xyleutes robiniæ, Locust-tree Carpenter Moth.
- Locust, Black.
  - Datana ministra, Yellow-necked Apple-tree Caterpillar.
  - Ecpantheria scribonia, Large Black Bear.
  - Eudamus tityrus, Tityrus Skipper.
  - Hyperchiria io, Io Moth.
  - Xyleutes robiniæ, Locust-tree Carpenter Moth.
- Locust, Viscid.
  - Eudamus tityrus, Tityrus Skipper.
- Logs. (See Stumps and Logs.)
- Lucerne, Medicago sativa.
  - Heliothis armigera, Corn worm.
- Lupine.
  - Callidryas eubule, Danewort Butterfly.
  - Colias eurytheme, Eurytheme Butterfly.
    - philodice, Philodice Butterfly.
  - Lycæna scudderi.
- Lupine, Blue.
  - Utetheisa bella.

M

- Maize.
  - Blissus leucopterus, Chinch bug.
  - Caloptenus femur-rubrum, Red-legged Locust.
- Mallow Family, Malvaceæ.
  - Pyrameis cardui, Thistle Butterfly,
    - huntera, Hunter's Butterfly.
- Mandrake. (See May-apple.)
- Mangel Wurtzel, Beta vulgaris, var.
  - Silpha opaca.
- Maple.
  - Ægeria acerni, Maple Ægerian.
  - Agrotis c-nigrum, Spotted Cutworm.
  - Apatela americana, American Maple Moth.
  - Attacus cecropia, Cecropia Silkworm.
  - Callosamia promethea, Prometheus Silkworm.
  - Eacles imperialis, Imperial Moth.
  - Elaphidion, Twig-pruners.
  - Hyphantria textor, Fall Web-worm.
  - Lachnosterna fraterna, Kindred May-beetle.
  - Lecanium acericola, Maple Bark-louse.
    - acericorticis.
  - Limacodes laticlavia.
  - Orgyia leucostigma, White-marked Tussock Moth.
  - Telea polyphemus, Polyphemus Silkworm.
- Maple, Ash-leaved, Box-elder, Negundo.
  - Ægeria acerni, Maple Ægerian.
  - Chaitophorus negundinis.
  - Chrysobothris femorata, Flat-headed Apple-tree Borer.
  - Lecanium acericola, Maple-tree Bark-louse.
  - Phytoptus sp.
- Maple, Norway, Pseudoplatanus.
  - Drepanosiphum acerina.
- Maple, Red.
  - Dryocampa rubicunda, Green-striped Maple-worm.
- Maple, Silver, White or Soft.
  - Ægeria acerni, Maple Ægerian.
  - Agrotis c-nigrum, Spotted Cutworm.
  - Chrysobothris femorata, Flat-headed Apple-tree Borer.
  - Dryocampa rubicunda, Green-striped Maple-worm.
  - Lecanium acericola, Maple-tree Bark-louse.
  - Pemphigus acerifolii.
  - Phytoptus quadripes.
  - Siphonophora acerifoliæ.
- Maple, Sugar.
  - Glycobius speciosus, Sugar-maple Borer.
  - Phytoptus acericola.
  - Psylla annulata, Annulated Psylla.
- Marigold, Pot, Calendula micrantha.
  - Siphonophora calendulæ.
    - calendulella.
- May-apple, Mandrake.
  - Euptoieta claudia.
- May-weed, Dog-fennel.
  - Caloptenus spretus, Rocky Mountain Locust.

Meadow Grass.
  Elateridæ, Wire worms.
  Leucania unipuncta, Army worm.
  Lachnosterna fraterna, White Grub of Kindred May-beetle.
    fusca, White Grub of Dark May-beetle.
    pilosicollis, White Grub of Hairy May-beetle.
Meadow-rue, Thalictrum.
  Calpe canadensis.
Meadow-sweet, Spiræa ulmaria.
  Siphonophora pisi, Green Dolphin.
Melon, Cantaleup.
  Phacellura nitidalis, Pickle worm.
Melon, Musk.
  Aphis cucumeris, Melon Plant-louse.
Melon, Nutmeg.
  Aphis cucumeris, Melon Plant-louse.
  Phacellura nitidalis, Pickle worm.
Melon. (See Watermelon.)
Melons.
  Aphis cucumeris, Melon Plant-louse.
    cucurbitæ.
  Deilephila lineata, White-lined Sphinx.
  Diabrotica 12-punctata.
    vittata, Striped Cucumber-beetle.
  Phacellura nitidalis, Pickle-worm.
Mignonette.
  Ceramica picta, Zebra Caterpillar.
  Pieris protodice, Southern Cabbage Butterfly.
    rapæ, European Cabbage Worm.
Milkweed, Silkweed, Asclepias.
  Danais archippus, Archippus Butterfly.
  Gortyna nitela, Stalk Borer.
Milkweed, Silkweed, Asclepias cornuti.
  Callipterus asclepiadis.
  Siphonophora asclepiadis, Milkweed Aphis.
Milkweed, Silkweed, Asclepias obtusifolia.
  Callipterus asclepiadis.
Milkweed, Silkweed, Asclepias syriaca.
  Aphis lutescens.
Mint, Spearmint, Mentha viridis.
  Siphonophora menthæ.
Morning-glory.
  Cassida bivittata, Two-striped Tortoise-beetle.
    nigripes, Black-legged Tortoise-beetle.
  Cassidinæ, Tortoise-beetles.
  Coptocycla aurichalcea, Golden Tortoise-beetle.
    guttata, Mottled Tortoise-beetle.
  Macrosila cingulata.
  Spilosoma virginica, Yellow Bear.
Moss.
  Byrrhus pilula.
Moss, on Oaks.
  Hypropepia fucosa.
Mountain Ash.
  Apatela occidentalis.
Mountain Ash.
  Chrysobothris femorata, Flat-headed Apple-tree Borer.
  Saperda candida, Round-headed Apple-tree Borer.
  Selandria cerasi, Cherry Slug.
Mountain Mint, Monarda.
  Pholisora catullus.
Mulberry, White.
  Agrotis saucia, Variegated Cutworm.
Mustard.
  Orchestris vittata, Striped Flea-beetle.
  Pieris napi.
    oleracea, Turnip Butterfly,
    protodice, Southern Cabbage Butterfly.
    rapæ, European Cabbage worm.
  Plusia brassicæ, Cabbage Plusia.
Mustard, Hedge, Sisymbrium officinale.
  Doryphora 10-lineata, Colorado Potato-beetle.
Myrica. (See Bayberry.)

N

Nasturtium.
  Pieris rapæ, European Cabbage worm.
    virginiensis.
Nectarine.
  Conotrachelus nenuphar, Plum Curculio.
Nettle.
  Grapta comma, Comma Butterfly.
    interrogationis, Semicolon Butterfly.
  Plusia chrysites.
    iota.
    simplex, Celery worm.
  Psylla urticæcolens.
  Pyrameis atalanta, Atalanta Butterfly.
    huntera, Hunter's Butterfly.
    cardui, Thistle Butterfly.
  Vanessa milberti.
Nettle, Great Stinging, Urtica dioica.
  Pyrameis atalanta, Atalanta Butterfly.
  Siphonophora pisi, Green Dolphin.
Nettle, Small Stinging, Urtica urens.
  Plusia interrogationis.
Nightshade.
  Doryphora 10-lineata, Colorado Potato-beetle.
Nursery Stock.
  Lachnosterna fusca, White Grub or Dark May-beetle.

O

Oak.
  Acridium rubiginosum.
  Anisota senatoria, Senatorial Dryocampa.
  Anorthosia punctipennella.
  Apatela occidentalis.
  Argyrolepia quercifoliana, Oak-leaf Tortrix.

- Oak.
  - Brenthus septentrionalis, Northern Brenthus.
  - Callipterus quercicola.
  - Catocala lineella.
  - Chrysobothris femorata, Flat-headed Apple-tree Borer.
  - Clisiocampa sylvatica, Tent Caterpillar of the Forest.
  - Datana ministra, Yellow-necked Apple-tree Caterpillar.
  - Drepanosiphum (?) quercifolii.
  - Dryocampa pellucida.
    - rubicunda, Rosy Dryocampa.
    - stigma.
  - Eacles imperialis, Imperial Moth.
  - Edema albifrons.
  - Elaphidion, Twig-pruners.
    - parallelum, Parallel Longhorn.
  - Endropia bilinearia.
  - Halesidota tessellaris, Checkered Tussock Moth.
  - Hispides.
  - Hyperchiria io, Io Moth.
  - Hyphantria textor, Fall Web-worm.
  - Lachnosterna fraterna, Kindred May-beetle.
    - fusca, Dark May-beetle.
    - pilosicollis, Hairy May-beetle.
  - Limenitis disippus, Disippus Butterfly.
  - Lucanus dama, Pinching bug.
    - elaphus, Stag Beetle.
  - Magdalis olyra.
  - Myzocallis bella.
  - Nisoniades juvenalis.
  - Orgyia leucostigma, White-marked Tussock Moth.
  - Parorgyia clintonis.
    - parallela.
  - Perophora melsheimeri.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Saturnia maia, Buck Moth.
  - Schizoneura fungicola.
    - querci, Woolly Aphis of the Oak.
  - Telea polyphemus, Polyphemus Silk-worm.
  - Thecla calanus.
    - m-album.
    - strigosa, Streaked Thecla.
    - titus.
  - Tolype velleda, Velleda Lappet Moth.
  - Tortrix fervidana.
    - paludana.
  - Tremex columba, Pigeon Tremex.
  - Xyleutes robiniæ, Locust-tree Carpenter Moth.
- Oak-apple.
  - Lithophane cinerea, Ash-gray Pinion.
- Oak, Black.
  - Argyrolepia quercifoliana, Oak-leaf Tortrix.
  - Elaphidion villosum, Oak Twig-borer.
- Oak, Black-jack.
- Oak.
  - Cicada septendecim, Seventeen-year Locust.
- Oak, Burr.
  - Argyrolepia quercifoliana, Oak-leaf Tortrix.
  - Ithycerus noveboracensis, New York Weevil.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Myzocallis bella.
  - Phytoptus querci.
  - Thecla strigosa, Streaked Thecla.
- Oak, Iron.
  - Phylloxera rileyi, Oak-leaf Phylloxera.
- Oak, Laurel or Shingle.
  - Callipterus hyalinus.
- Oak, Pin.
  - Argyrolepia quercifoliana, Oak-leaf Tortrix.
- Oak, Post.
  - Agrilus lateralis.
- Oak, Red.
  - Argyrolepia quercifoliana, Oak-leaf Tortrix.
  - Callipterus quercifolii.
    - walshi.
  - Semasia prunivora, Plum Moth.
  - Xyleutes robiniæ, Locust-tree Carpenter Moth.
- Oak, Scrub.
  - Limenitis ursula, Ursula Butterfly.
- Oak, Swamp Chestnut.
  - Chaitophorus quercicola.
- Oak, Swamp White.
  - Callipterus discolor.
    - punctata.
  - Phylloxera rileyi, Oak-leaf Phylloxera.
- Oak, White.
  - Agrilus lateralis.
  - Argyrolepia quercifoliana, Oak-leaf Tortrix.
  - Chrysobothris femorata, Flat-headed Apple-tree borer.
  - Elaphidion villosum, Oak Twig-borer.
  - Lachnus quercifoliæ, Oak-leaf Lachnus.
  - Pandeleteius hilaris, Gray-sided Curculio.
  - Phylloxera rileyi, Oak-leaf Phylloxera.
- Oak wood, Decayed. (See Decayed Oak wood.)
- Oats.
  - Agrotis saucia, Variagated Cutworm.
  - Blissus leucopterus, Chinch bug.
  - Caloptenus spretus, Rocky Mountain Locust.
  - Diabrotica longicornis, Corn Root-worm.
  - Doryphora 10-lineata, Colorado Potato-beetle.
  - Elateridæ, Wire-worms.
  - Gelechia cerealella, Angoumois Grain Moth.

- Oats.
  - Gortyna nitela, Stalk Borer.
  - Leucania unipuncta, Army worm.
  - Siphonophora avenæ, Grain Plant-louse.
- Oleander.
  - Aphis nerii.
- Onion.
  - Acridium americanum, American Locust.
  - Caloptenus spretus, Rocky Mountain Locust.
  - Elateridæ, Wire worms.
- Orache, Garden, Atriplex.
  - Aphis rumicis, Bean Aphis.
- Orange.
  - Papilio cresphontes, Cresphontes Butterfly.
  - Phytoptus oleivorus.
- Osage Orange.
  - Flata conica.
  - Hydnocera pallipennis.
  - Hyphantria textor, Fall Web-worm.
  - Lecanium macluræ.
  - Ormenis pruinosa.
- Ox-eye Daisy.
  - Macrodactylus subspinosus, Rose bug.

P

- Papaw.
  - Papilio ajax, Ajax Butterfly.
- Parsley Family. Umbelliferæ.
  - Papilio asterias, Parsnip worm.
- Parsley.
  - Papilio asterias, Parsnip worm.
- Parsnip.
  - Papilio asterias, Parsnip worm.
  - Siphocoryne pastinacæ.
- Passion Flower.
  - Euptoieta claudia.
- Passion Flower, Blue.
  - Agraulis vanillæ.
- Passion Flower, Scarlet.
  - Agraulis vanillæ.
- Pea.
  - Bruchidæ, Pea and Bean Weevils.
  - Bruchus granarius, Grain Bruchus.
    - pisi, Pea Weevil.
  - Callidryas eubule, Danewort Butterfly.
  - Ceramica picta, Zebra Caterpillar.
  - Colias eurytheme, Eurytheme Butterfly.
    - philodice, Philodice Butterfly.
  - Heliothis armigera, Corn worm.
  - Siphonophora pisi, Green Dolphin.
  - Spilosoma virginica, Yellow Bear.
- Peach.
  - Ægeria exitiosa, Peach Borer.
  - Agrotis c-nigrum, Spotted Cutworm.
    - saucia, Variegated Cutworm.
  - Amphicerus bicaudatus, Twig and Axil Borer.
  - Anarsia lineatella, Peach-twig Borer.
- Peach.
  - Anisopteryx antumnata, Fall Canker-worm.
    - vernata, Spring Canker-worm.
  - Aphis amygdali, Almond Aphis.
  - Arctia phalerata, Harnessed Moth.
  - Bostrichus basilaris, Shagbark Hickory-tree Borer.
  - Caloptenus spretus, Rocky Mountain Locust.
  - Chrysobothris femorata, Flat-headed Apple-tree Borer.
  - Clisiocampa sylvatica, Tent Caterpillar of the Forest.
  - Conotrachelus nenuphar, Plum Curculio.
  - Dicerca divaricata, Cherry-tree Borer.
  - Euryomia inda, Indian Cetonian.
  - Gortyna nitela, Stalk Borer.
  - Ithycerus noveboracensis, New York Weevil.
  - Lithophane picta.
  - Melanactes piceus, Wire-worm.
  - Myzus persicæ, Peach-tree Aphis.
  - Prodenia lineatella.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Saturnia maia, Buck Moth.
  - Tetranychus, Red Spider.
- Pear.
  - Ægeria pyri, Pear-tree Borer.
  - Agrotis c-nigrum, Spotted Cutworm.
  - Amphicerus bicaudatus, Twig and Axil Borer.
  - Anthonomus pyri, Pear Weevil.
    - 4-gibbus, Apple Curculio.
  - Aspidiotus harrisi, Harris's Bark-louse.
  - Callimorpha lecontei, Callimorpha Pear Caterpillar.
  - Carpocapsa pomonella, Codling Moth.
  - Chrysobothris femorata, Flat-headed Apple-tree Borer.
  - Cicada septendecim, Seventeen-year Locust.
  - Conotrachelus cratægi, Quince Curculio.
    - nenuphar, Plum Curculio.
  - Haltica helxines. Small Bronze Flea-beetle.
  - Hyphantria textor, Fall Web-worm.
  - Ips quadrisignatus.
  - Ithycerus noveboracensis, New York Weevil.
  - Lecanium pyri.
  - Œdemasia concinna, Red-humped Prominent.
  - Orgyia leucostigma, White-marked Tussock-Moth.
  - Phytoptus pyri.
  - Platycerus quercus.
  - Prionus laticollis, Broad-necked Prionus.
  - Psylla pyri, Pear Flea-louse.

- Pear.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Selandria cerasi, Cherry Slug.
  - Tetranychus, Red Spider.
  - Tremex columba, Pigeon Tremex.
- Pecan.
  - Callipterus caryæ.
  - Scolytus 4-spinosus, Hickory Bark Borer.
- Pepper.
  - Doryphora 10-lineata, Colorado Potato-beetle.
  - Heliothis armigera, Corn worm.
- Pepper. Cayenne.
  - Caloptenus spretus, Rocky Mountain Locust.
- Pepper grass, Lepidium virginicum.
  - Arctia phalerata, Harnessed Moth.
  - Eutrapela transversata, Span worm.
- Peronospora.
  - Diabrotica longicornis, Corn Root-worm.
- Persimmon.
  - Actias luna, Luna Silkworm.
  - Aphis diospyri.
  - Citheronia regalis, Royal Walnut Moth.
  - Psylla sp.
- Phaseolus perennis. (See Bean, Wild.)
- Phlox.
  - Heliothis phloxiphagus, Phlox worm.
- Phoma.
  - Loxopeza atriventris.
- Picotee.
  - Elateridæ, Wire worms.
- Pignut. (See Hickory, Pignut.)
- Pigweed, Amarantus retroflexus.
  - Doryphora 10-lineata, Colorado Potato-beetle.
- Pigweed. Chenopodium.
  - Aphis rumicis, Bean Aphis.
  - Gortyna nitela, Stalk Borer.
- Pine.
  - Aphis pinicolens, Pine-inhabiting Aphis.
  - Callidium amœnum.
  - Callosamia promethae. Prometheus Silkworm.
  - Chalcophora virginiensis.
  - Chermes pinifoliæ.
  - Coccinellidæ, Lady bugs.
  - Curculionidæ, Snout Beetles.
  - Diraphia femoralis, Black-legged Diraphia.
    - vernalis, Jumping Plant-louse.
  - Eacles imperialis, Imperial Moth.
  - Hylobius pales, Pales Weevil.
  - Hylurgus terebrans, Boring Hylurgus.
  - Lachnus strobi, White-pine Lachnus.
  - Lophyrus abietis, Fir-tree Saw-fly.
  - Pissodes strobi, White-pine Weevil.
  - Platycerura furcilla.
  - Sphinx coniferarum.
  - Thecla humuli, Hop-vine Thecla.
- Pine
  - Thecla niphon.
  - Urocerus albicornis.
- Pine Lumber.
  - Callidium sp.
- Pine, Pinus palustris.
  - Sphinx coniferarum.
- Pine, Scotch.
  - Mytilaspis pinifolii, Pine-leaf Scale-insect.
- Pine, White.
  - Lachnus strobi, White-pine Lachnus.
  - Lophyrus abbotti, Abbott's Saw-fly.
  - Mytilaspis pinifolii, Pine-leaf Scale-insect.
  - Pissodes strobi, White-pine Weevil.
  - Platycerura furcilla.
  - Schizoneura pinicola.
    - strobi, Pine-tree Blight.
  - Sphinx harrisi, Hawk Moth.
    - pineum, Hawk Moth.
  - Urocerus abdominalis.
- Pink.
  - Elateridæ, Wire worms.
- Plantain.
  - Arctia arge, Arge Tiger Moth,
    - isabella, Hedgehog Caterpillar.
    - phalerata, Harnessed Moth.
  - Ecpantheria scribonia, Large Black Bear.
  - Melitæa phæton.
  - Plusia precationis, Thistle Plusia.
    - simplex, Celery worm.
  - Pyrrharctia isabella, Hedgehog Caterpillar.
  - Spilosoma virginica. Yellow Bear.
- Plantain, Plantago lanceolata.
  - Junonia lavinia, Lavinia Butterfly.
- Plum.
  - Actias luna, Luna Silkworm.
  - Ægeria exitiosa, Peach Borer.
    - pictipes.
  - Anthonomus prunicida, Plum Gouger.
  - Apatela occidentalis.
    - superans, Green Chestnut-backed Caterpillar.
  - Aphis pruni, Plum Aphis.
  - Attacus cecropia, Cecropia Silkworm.
  - Callosamia promethea, Prometheus Silkworm.
  - Chrysobothris femorata, Flat-headed Apple-tree Borer.
  - Clisiocampa americana, Apple-tree Tent Caterpillar.
    - sylvatica. Tent Caterpillar of the Forest.
  - Cœlodasys unicornis, Unicorn Apple-tree Caterpillar.
  - Conotrachelus nenuphar, Plum Curculio.
  - Haltica helxines, Small Bronze Flea-beetle.
  - Hyalopterus pruni.
  - Ithycerus noveboracensis, New York Weevil.

- Plum.
  - Limenitis disippus, Disippus Butterfly.
  - Macrodactylus subspinosus, Rose bug.
  - Œdemasia concinna, Red-humped Prominent.
  - Orgyia leucostigma, White-marked Tussock Moth.
  - Parorgyia parallela.
  - Phorodon humuli, var. mahaleb.
  - Phycita nebulo, Apple Leaf-crumpler.
  - Pyrophila pyramidoides, Green-spotted Grape-worm.
  - Samia cynthia, Ailanthus Silkworm.
  - Semasia prunivora, Plum Moth.
  - Sphinx drupiferarum.
- Plum, Sloe.
  - Phorodon humuli, var. mahaleb.
- Poison Ivy.
  - Phytoptus sp.
- Pollen.
  - Coccinella.
    - sanguinea, Trim Lady-bird.
  - Coccinellidæ, Lady bugs.
  - Harpalus.
  - Hippodamia convergens, Convergent Lady-bird.
    - glacialis, Icy Lady-bug.
  - Megilla maculata, Spotted Lady-bird.
- Polygonum.
  - Gortyna nitela, Stalk Borer.
- Pomegranate.
  - Thecla isocrates.
- Poplar.
  - Apatela americana, American Maple Moth.
  - Callosamia promethea, Promethus Silkworm.
  - Clisiocampa sylvatica, Tent Caterpillar of the Forest.
  - Gastropacha americana.
  - Hyperchiria io, Io Moth.
  - Limenitis disippus, Disippus Butterfly.
    - ursula, Ursula Butterfly.
  - Lithophane cinerea, Ash-gray Pinion.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Lucanus elephas, Stag Beetle.
  - Prionus laticollis, Broad-necked Prionus.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Smerinthus modestus.
  - Telea polyphemus, Polyphemus Silkworm.
  - Vanessa antiopa, Antiopa Butterfly.
- Poplar, Balsam.
  - Pemphigus popularia, Poplar Gall-louse.
    - populi - globuli, Poplar Bullet Gall-louse.
    - populi-ramulorum.
    - populi-transversus.
    - populi-venæ, Poplar-vein Gall-louse.
- Poplar, Balsam.
    - vagabundus, Vagabond Gall-louse.
- Poplar, Lombardy.
  - Agrilus granulatus, Lombardy Poplar Borer.
  - Lachnosterna fraterna, Kindred May-beetle.
  - Prionus laticollis, Broad-necked Prionus.
- Poppy.
  - Aphis rumicis, Bean Aphis.
- Potato.
  - Agrotis messoria, Dark-sided Cutworm.
  - Baridius trinotatus, Potato-stalk Weevil.
  - Blister Beetles.
  - Caloptenus femur-rubrum, Red-legged Locust.
    - spretus, Rocky Mountain Locust.
  - Doryphora 10-lineata, Colorado Potato-beetle.
  - Drasteria erechtea, Clover Drasteria.
  - Elateridæ, Wire worms.
  - Epicauta cinerea, Margined Blister-beetle.
    - vittata, Striped Potato beetle.
  - Epitrix cucumeris, Cucumber Flea-beetle.
  - Gortyna nitela, Stalk Borer.
  - Lema trilineata, Three-lined Potato-beetle.
  - Lygus lineolaris, Tarnished Plant-bug.
  - Macrobasis unicolor, Ash-gray Blister-beetle.
  - Macrosila carolina, Tobacco worm.
    - 5-maculata, Tobacco worm.
- Prickly Ash.
  - Chrysophanus thoë, Thoë Butterfly.
  - Papilio cresphontes, Cresphontes Butterfly.
    - troilus, Troilus Butterfly.
- Prickly Ash, Northern, Toothache-tree, Zanthoxylum americanum.
  - Chrysophanus thoë, Thoë Butterfly.
- Privet, Ligustrum.
  - Daremma undulosa.
- Pulmonaria angustifolia.
  - Plusia modesta.
- Pulse Family, Leguminosæ.
  - Agrotis annexa, Cabbage Cutworm.
  - Aphis medicaginis.
  - Terias lisa, Lisa Butterfly.
- Pumpkin.
  - Agrotis clandestina, W-marked cutworm.
  - Diabrotica vittata, Striped Cucumber-beetle.
  - Heliothis armigera, Corn worm.
  - Melittia cucurbitæ, Squash Borer.
- Purslane.
  - Deilephila lineata, White-lined Sphinx.
  - Diabrotica longicornis, Corn Root-worm.

Q

- Quince.
  - Conotrachelus cratægi, Quince Curculio.
    - nenuphar, Plum Curculio.
  - Datana ministra, Yellow-necked Apple-tree Caterpillar.
  - Phycita nebulo, Apple Leaf-crumpler.
  - Saperda candida, Round-headed Apple-tree Borer.
  - Telea polyphemus, Polyphemus Silk-worm.

R

- Radish.
  - Deilephila lineata, White-lined Sphinx.
  - Orchestris vittata, Striped Flea-beetle.
  - Pieris napi.
    - oleracea, Turnip Butterfly.
    - rapæ, European Cabbage worm.
    - virginiensis.
  - Plusia brassicæ. Cabbage Plusia.
- Ragweed, Ambrosia.
  - Megilla maculata, Spotted Lady-bug.
- Ragweed, Ambrosia artemisiæfolia.
  - Diabrotica longicornis, Corn Root-worm.
  - Gortyna nitela, Stalk Borer.
  - Leucarctia acræa, Salt-marsh Caterpillar.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Telesilla cinereola.
- Ragweed, Ambrosia psilostachya.
  - Siphonophora ambrosiæ.
- Ragweed, Ambrosia trifida.
  - Diabrotica longicornis, Corn Root-worm.
  - Gortyna nebris, Stalk Borer.
  - Siphonophora rudbeckiæ.
- Raphanus.
  - Pieris virginiensis.
- Raspberry.
  - Ægeria rubi, Raspberry Root-borer.
  - Agrilus ruficollis, Raspberry Cane-borer.
  - Anatis 15-punctata, Fifteen-spotted Lady-bug.
  - Ceramica picta, Zebra Caterpillar.
  - Eupithecia interrupto-fasciata, Currant Fruit-worm.
  - Loxotænia rozaceana, Greater Leaf-roller.
  - Pemphigus rubi.
  - Prodenia lineatella.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Selandria rubi, Raspberry Slug.
  - Siphonophora rubi.
  - Synchlora rubivoraria, Raspberry Geometer.
- Raspberry, Wild.
  - Loxotænia rosaceana, Greater Leaf-roller.
- Rattle-box, Crotalaria.
  - Utetheisa bella.
- Ray-grass. (See Grass, Ray- or Rye-.)
- Red-bud.
  - Fidia viticida, Grape-vine Fidia.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
- Red Root.
  - Lycæna comyntas, Comyntas Butterfly.
- Rhubarb.
  - Caloptenus spretus, Rocky Mountain Locust.
  - Gortyna nitela, Stalk Borer.
- Rocket.
  - Cerostoma porrectella.
- Rosaceæ. (See Rose Family.)
- Rose.
  - Clisiocampa sylvatica, Tent Caterpillar of the Forest.
  - Empretia stimulea, Saddle-back Moth.
  - Hyphantria textor, Fall Web-worm.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Macrodactylus subspinosus, Rose bug.
  - Œdemasia concinna, Red-humped Prominent.
  - Orgyia leucostigma, White-marked Tussock Moth.
  - Phigalia strigataria.
  - Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  - Pyrrhia exprimens.
  - Selandria rosæ, Rose Slug.
  - Siphonophora, rosæ, Rose Aphis.
    - rosarum.
  - Smerinthus excæcatus, Blind-eyed Sphinx.
  - Telea polyphemus, Polyphemus Silk-worm.
  - Tetranychus, Red Spider.
- Rose, Wild, Rosa blanda.
  - Penthina nimbatana.
- Rose Family, Rosaceæ.
  - Pseudothyatira cymatophoroides.
  - Serica vespertina, Evening Silky Leaf-chafer.
- Rosin-plant, Silphium integrifolium.
  - Siphonophora rudbeckiæ.
- Rye.
  - Agrotis saucia, Variegated Cutworm.
  - Blissus leucopterus, Chinch bug.
  - Caloptenus spretus, Rocky Mountain Locust.
  - Elateridæ, Wire worms.
  - Isosoma hordei, Joint Worm.
  - Laphygma frugiperda, Fall Army-worm.
  - Leucania unipuncta, Army-worm.
  - Siphonophora avenæ, Grain Plant-louse.
- Rye-grass. (See Grass, Ray- or Ray-.)

S

St. John's-wort, Hypericum kalmianum.
  Aphis hyperici.
St. John's-wort, Hypericum prolificum.
  Myzocallis hyperici.
Salsify.
  Prodenia lineatella.
Salt Marsh Grass.
  Leucarctia acræa, Salt-marsh Caterpillar.
Salvia.
  Gortyna nitela, Stalk Borer.
Sassafras.
  Callosamia promethea, Prometheus Silk-worm.
  Hyperchiria io, Io Moth.
  Papilio Troilus, troilus Butterfly.
Saw-grass, Saur-grass, Cladium effusum.
  Pamphila palatka.
Scrub Grass.
  Pamphila sassacus, Sassacus Skipper.
Sedge.
  Satyrus alope, Alope Butterfly.
    nephele, Nephele Butterfly.
Senecio cineraria. (See Cineraria.)
Senna.
  Terias nicippe, Nicippe Butterfly.
Septoria.
  Diabrotica longicornis, Corn Root-worm.
Shad Bush. (See June Berry.)
Shag-bark Hickory. (See Hickory, Shag-bark or Shell-bark.)
Shell-bark Hickory. (See Hickory, Shag-bark or Shell-bark.)
Shell-flower. (See Turtle-head.)
Shepherd's Purse.
  Aphis rumicis, Bean Aphis.
  Siphonophora pisi, Green Dolphin.
Shrubs.
  Agrotis messoria, Dark-sided Cutworm.
    scandens, Climbing Cutworm.
  Anomala binotata, Two-spotted Vine-chafer.
  Callosamia promethea, Prometheus Silkworm.
  Hibernia tiliaria, Yellow Canker-worm.
  Leucania unipuncta, Army worm.
  Macrodactylus subspinosus, Rose bug.
  Tetranychus, Red Spider.
Silkweed. (See Milkweed.)
Smartweed.
  Apatela oblinita, Smeared Dagger.
  Arctia phalerata, Harnessed Moth.
  Arsilonche henrici.
  Ceramica picta, Zebra Caterpillar.
  Diabrotica longicornis, Corn Root-worm.
  Loxotænia rosaceana, Greater Leaf-roller.
  Spilosoma virginica, Yellow Bear.
Smilax.
  Thecla smilacis.
Smoke Tree, Venetian Sumach.
  Blepharida rhois, Jumping Sumach-beetle.
Snakeroot, Black, Cimicifuga racemosa.
  Lycæna comyntas, Comyntas Butterfly.
    pseudargiolus.
Snakeroot, Virginia. (See Virginia Snake-root.)
Snowball, Viburnum opulus, var. roseum.
  Aphis viburni, Snowball Aphis.
Snowberry, Symphoricarpus.
  Ceramica picta, Zebra Caterpillar.
  Hyperchiria io, Io Moth.
  Sesia thysbe, Thysbe Clear Wing.
    tenuis.
Snowberry, Symphoricarpus vulgaris.
  Aphis symphoricarpi, Snowberry Aphis.
  Tortrix rileyana, Walnut Tortrix.
Snowdrop-tree, Halesia.
  Callosamia promethea, Prometheus Silkworm.
Soapwort, Bouncing Bet, Saponaria officinalis.
  Leucania unipuncta, Army-worm Moth.
Sorghum.
  Caloptenus spretus, Rocky Mountain Locust.
  Blissus leucopterus, Chinch bug.
  Sipha maidis, Corn Aphis.
Sorrel.
  Chrysophanus americana, American Copper Butterfly.
  Spilosoma virginica, Yellow Bear.
Sorrel, Field, Rumex acetosella.
  Aphis rumicis, Bean Aphis.
Sow-thistle, Sonchus oleraceus.
  Siphonophora lactucæ.
    sonchi.
Spearmint. (See Mint.)
Spice-bush, Benzoin, Lindera.
  Callosamia promethea, Prometheus Silkworm.
  Papilio troilus, Troilus Butterfly.
Spider Flower.
  Pieris monuste.
Spinach.
  Agrotis c-nigrum, Spotted Cutworm.
  Gortyna nitela, Stalk Borer.
Spiræa.
  Gortyna nitela, Stalk Borer.
  Saturnia maia, Buck Moth.
Spruce.
  Chermes abieticolens, Adelges of the Spruce.
  Hylotrupes bajalus.
  Lophyrus abietis, Fir-tree Saw-fly.
  Orgyia leucostigma, White-marked Tussock Moth.
Spruce, Black.
  Lachnus abietis, Spruce-tree Lachnus.
Spruce lumber.
  Callidium sp.

- Spurge, Euphorbia marginata.
  - Siphonophora euphorbicola, Margined spurge Aphis.
- Spurge, Spotted, Euphorbia maculata.
  - Siphonophora euphorbiæ, Spotted-spurge Aphis.
- Squash.
  - Aphis cucumeris, Melon Plant-louse.
  - Diabrotica 12-punctata.
    - longicornis, Corn Root-worm.
    - vittata, Striped Cucumber-beetle.
  - Elateridæ, Wire worms.
  - Melittia cucurbitæ, Squash Borer.
  - Phacellura nitidalis, Pickle worm.
  - Siphonophora cucurbitæ.
- Squash, Hubbard.
  - Melittia cucurbitæ, Squash Borer.
- Stock, Ten Weeks'.
  - Orchestris vittata, Striped Flea-beetle.
- Stock, Virginia.
  - Orchestris vittata, Striped Flea-beetle.
- Stonecrop, Sedum.
  - Euptoieta claudia.
- Straw.
  - Pyralis farinalis, Meal Snout-moth.
- Strawberry.
  - Allorhina nitida.
  - Anarsia lineatella, Strawberry Crown Miner.
  - Anchylopera fragariæ, Strawberry Leaf-roller.
  - Angerona crocataria.
  - Colaspis flavida, Grape-vine Colaspis.
  - Elateridæ, Wire worms.
  - Emphytus maculatus, Strawberry Saw-fly.
  - Lachnosterna fusca, White Grub or Dark May-beetle.
  - Leucania unipuncta, Army worm.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Melolonthidæ, White Grubs.
  - Nematocampa filamentaria, Strawberry Geometer.
  - Siphonophora fragariæ, Strawberry Aphis.
  - Tyloderma fragariæ, Strawberry Crown-borer.
- Strawberry, Wild.
  - Anarsia lineatella, Strawberry Crown Miner.
  - Loxotænia rosaceana, Greater Leaf roller.
- Stumps and Logs.
  - Bolitophagus cornutus.
- Sumach.
  - Blepharida rhois, Jumping Sumach-beetle.
  - Citheronia regalis, Royal Walnut Moth.
  - Datana ministra, Yellow-necked Apple-tree Caterpillar.
    - perspicua.
  - Loxotænia rosaceana, Greater Leaf-roller.
  - Pemphigus rhois, Sumach Gall Plant-louse.
- Sumach, Venetian. (See Smoke Tree.)
- Sunflower, Helianthus.
  - Aphis helianthi.
  - Diabrotica longicornis, Corn Root-worm.
  - Pyrameis cardui, Thistle Butterfly.
    - huntera, Hunter's Butterfly.
  - Spilosoma virginica, Yellow Bear.
- Sunflower, Helianthus decapetalus.
  - Ecpantheria scribonia, Large Black Bear.
- Sunflower, Wild.
  - Ecpantheria scribonia, Large Black Bear.
- Sunflower, Wild, Helianthus grosse-serratus.
  - Gelechia flavocostella.
  - Loxotænia rosaceana, Greater Leaf-roller.
- Sweet Briar.
  - Serica Respertina, Evening Silky Leaf-chafer.
- Sweet Fennel.
  - Papilio asterias, Asterias Butterfly.
- Sweet Fern.
  - Hyperchiria io, Io Moth.
- Sweet Flag, Acorus calamus.
  - Diraphia calamorum, Calamus Diraphia.
    - maculipennis, Spotted-winged Diraphia.
- Sweet-gum Tree, Liquidambar.
  - Actias luna, Luna Silkworm.
  - Callosamia promethea, Prometheus Silkworm.
  - Eacles imperialis, Imperial Moth.
- Sweet-pea.
  - Siphonophora pisi, Green Dolphin.
- Sweet Potato.
  - Cassida bivittata, Two-striped Tortoise-beetle.
    - nigripes, Black-legged Tortoise-beetle.
  - Cassididæ, Tortoise Beetles.
  - Coptocycla aurichalcea, Golden Tortoise-beetle.
    - guttata, Mottled Tortoise-beetle.
  - Macrosila cingulata.
- Sweet William.
  - Elateridæ, Wire worms.
- Sycamore.
  - Eacles imperialis, Imperial Moth.
  - Hyphantria textor, Fall Web-worm.
  - Telea polyphemus, Polyphemus Silk-worm.
  - Tremex columba, Pigeon Tremex.

T

- Tamarack. (See Larch, American.)
- Tansy, Tanacetum vulgare.
  - Siphonophora tanaceti, Tansy Aphis.

Tartarian Honeysuckle. (See Honeysuckle, Tartarian.)
Thistle.
  Aphis carduella.
  Diabrotica longicornis, Corn Root-worm.
  Gortyna cataphracta.
  Plusia chrysites.
    precationis, Thistle Plusia.
  Pyrameis cardui, Thistle Butterfly.
    huntera, Hunter's Butterfly.
Thistle, Blessed, Cnicus.
  Pyrameis cardui, Thistle Butterfly.
    huntera, Hunter's Butterfly.
Thistle, Canada.
  Siphonopora rudbeckiæ.
Thistle, Cirsium lanceolatum.
  Doryphora 10-lineata, Colorado Potato-beetle.
  Loxotænia rosaceana, Greater Leaf-roller.
Thistle, Cotton, Onopordon acanthium.
  Pyrameis cardui, Thistle Butterfly.
    huntera, Hunter's Butterfly.
Thistle, Plumeless, Carduus.
  Pyrameis cardui, Thistle Butterfly.
    huntera, Hunter's Butterfly.
Thistle, Spear.
  Pyrameis cardui, Thistle Butterfly.
Thorn, Hawthorn, Cratægus.
  Datana ministra, Yellow-necked Apple-tree Caterpillar.
    perspicua.
  Gortyna cataphracta.
  Œdemasia concinna, Red-humped Prominent.
  Papilio turnus, Turnus Butterfly.
  Pyrophila pyramidoides, Green Cream-spotted Grape-worm.
  Saperda candida, Round-headed Apple-tree Borer.
  Sesia thysbe, Thysbe Clear Wing.
  Telea polyphemus, Polyphemus Silkworm.
  Thecla humuli, Hop-vine Thecla.
    strigosa, Streaked Thecla.
Thorn, Cratægus punctata.
  Aphis cratægifoliæ, Thorn-leaf Aphis.
Thorn, Scarlet-fruited or White, Cratægus coccinea.
  Lagria hirta.
  Siphonophora cratægi.
Thorn Apple, Apple of Peru.
  Doryphora 10-lineata, Colorado Potato-beetle.
Tick-trefoil, Desmodium.
  Lycæna comyntas, Comyntas Butterfly.
Tick-trefoil, Desmodium dillenii.
  Eudamus bathyllus, Bathyllus Skipper.
Tick-trefoil, Desmodium marilandicum.
  Lycæna comyntas, Comyntas Butterfly.
Tobacco.
  Agrotis ypsilon, Greasy Cutworm.
  Caloptenus femur-rubrum, Red-legged Locust.
Tobacco.
    spretus, Rocky Mountain Locust.
  Doryphora 10-lineata, Colorado Potato-beetle.
  Heliothis armigera, Corn worm.
  Macrosila carolina, Tobacco worm.
    5-maculata, Tomato worm.
Tomato.
  Agrotis ypsilon, Greasy Cutworm.
  Doryphora 10-lineata, Colorado Potato-beetle.
  Epicauta cinerea, Margined Blister beetle.
    vittata, Striped Potato-beetle.
  Gortyna nitela, Stalk Borer.
  Heliothis armigera, Corn worm.
  Macrosila carolina, Tobacco worm.
    5-maculata, Tomato worm.
  Megoura solani.
Toothache-tree. (See Prickly Ash, Northern.)
Touch-me-not, Wild, Impatiens fulva.
  Aphis impatiens, Touch-me-not Aphis.
Trees.
  Agrotis clandestina, W-marked Cutworm.
    messoria, Dark-sided Cutworm.
    scandens, Climbing Cutworm.
  Anisopteryx autumnata, Fall Canker-worm.
  Buprestidæ, Saw-horned Wood-borers.
  Byrrhus pilula.
  Hibernia tiliaria, Yellow Canker-worm.
  Lachnosterna fraterna, Kindred May-beetle.
    fusca, Dark May-beetle.
    pilosicollis, Hairy May-beetle.
  Lachnus, Twig Lice.
  Leucania unipuncta, Army worm.
  Macrodactylus subspinosus, Rose bug.
  Melanotus fissilis.
  Tetranychus, Red Spider.
Trees, Deciduous.
  Attacus cecropia, Cecropia Silkworm.
  Callosamia promethea, Prometheus Silkworm.
  Cicada septendecim, Seventeen-year Locust.
  Lachnosterna fraterna, Kindred May-beetle.
    fusca, Dark May-beetle.
    pilosicollis, Hairy May-beetle.
Trees, Soft-wooded.
  Xiphidra albicornis.
Trumpet Creeper, Tecoma radicans.
  Psychomorpha epimenis, Grape-vine Epimenis.
Tulip.
  Aphis tulipæ.
  Rhopalosiphum tulipæ.
  Siphonophora tulipæ.
Tulip-tree.
  Callosamia promethea, Prometheus Silkworm.

Tulip-tree.
- Lucanus elaphus, Stag Beetle.
- Siphonophora liriodendri.

Turnip.
- Caloptenus spretus, Rocky Mountain Locust.
- Ceramica picta, Zebra Caterpillar.
- Deilephila lineata, White-lined Sphinx.
- Elateridæ, Wire worms.
- Leucania unipuncta, Army worm.
- Orchestris vittata, Striped Flea-beetle.
- Pieris oleracea, Turnip Butterfly.
  - rapæ European Cabbage worm.
  - virginiensis.
- Pionea rimosalis, Cabbage Pionea.
- Plusia brassicæ, Cabbage Plusia.
- Plutella cruciferarum, European Cabbage Web Moth.

Turnip, Rutabaga.
- Ceramica picta, Zebra Caterpillar.
- Pieris rapæ, European Cabbage worm.

Turtle-head, Snake head, Shell-flower, Chelone glabra.
- Melitæa phæton.

U

Umbelliferæ. (See Parsley Family.)

Uredo.
- Diabrotica longicornis, Corn Root-worm.

Ustilago.
- Coccinella 9-notata, Nine-spotted Lady-bug.
  - 5-notata.
- Diabrotica longicornis, Corn Root-worm.

V

Vegetables, Garden.
- Agrotis clandestina, W-marked Cut-worm.
  - c-nigrum, Spotted Cutworm.
  - herilis, Western Striped Cutworm.
  - lubricans.
  - saucia, Variegated Cutworm.
  - subgothica, Dingy Cutworm.
  - ypsilon. Greasy Cutworm.
- Caloptenus bivittatus, Striped Caloptenus.
  - femur-rubrum, Red-legged Locust.
  - spretus, Rocky Mountain Locust.
- Ceramica picta, Zebra Caterpillar.
- Gortyna nitela, Stalk Borer.
- Hadena devastatrix, Glassy Cut-worm.
- Leucarctia acræa, Salt-marsh Caterpillar.
- Macrodactylus subspinosus, Rose bug.
- Mamestra subjuncta, Speckled Cut-worm.
- Melolonthidæ, White Grubs.
- Pionea forficialis, Cabbage-garden Pebble Moth.

Vegetables, Garden.
- Plutella cruciferarum, European Cabbage Web Moth.
- Psylliodes punctulata, Punctulated Flea-beetle.
- Pyrrharctia arge, Arge Tiger Moth.

Verbena.
- Dendroptus sp., Verbena Mite.
- Siphonophora verbenæ, Verbena, Aphis.
- Spilosoma virginica, Yellow Bear.

Vervain, Blue, Verbena hastata.
- Adipsophanes miscellus.
- Crambodes talidiformis.
- Loxotænia rosaceana, Greater Leaf-roller.

Vetch, Tufted, Vicia cracca.
- Aphis rumicis, Bean Aphis.

Vetchling, Everlasting Pea, Lathyrus.
- Nisoniades juvenalis.

Violet.
- Argynnis alcestis.
  - aphrodite Aphrodite Butterfly.
  - atlantis.
  - bellona.
  - cybele.
  - egleis.
  - diana, Diana butterfly.
  - idalia, Idalia butterfly.
  - myrina.
- Euptoieta claudia.

Virginia Creeper.
- Acoloithus americana, American Procris.
  - falsarius.
- Citheronia regalis, Royal Walnut Moth.
- Eudryas grata, Beautiful Wood-nymph.
- Pelidnota punctata, Spotted Vine-chafer.
- Philampelus achemon, Achemon Sphinx.
  - pandorus, Satellite Sphinx.
- Thyreus abbotti, Abbott's Sphinx.

Virginia Snakeroot, Aristolochia serpentaria.
- Papili. philenor, Philenor Swallow-tail.

W

Walnut.
- Actias luna, Luna Silkworm.
- Callipterus caryæ.
- Citheronia regalis, Royal Walnut Moth.
- Clisiocampa sylvatica, Tent Caterpillar of the Forest.
- Cressonia juglandis, Walnut Sphinx.
- Datana ministra, Yellow-necked Apple-tree Caterpillar.
- Hyphantria textor, Fall Web-worm.
- Orgyia leucostigma, White-marked Tussock Moth.
- Phycita juglandis, Walnut Leaf-crumpler.
- Schizoneura caryæ, Hickory Blight.
- Telea polyphemus, Polyphemus Silk-worm.

- Walnut, Black.
  - Datana ministra, Yellow-necked Appletree Caterpillar.
  - Hyphantria textor, Fall Web-worm.
  - Melanotus communis, Wire worm.
    - fissilis, Wire worm.
  - Orgyia leucostigma, White-marked Tussock Moth.
  - Phycita juglandis, Walnut Leaf-crumpler.
  - Tortrix rileyana, Walnut Tortrix.
- Walnut, White. (See Butternut.)
- Watermelon.
  - Aphis cucumeris, Melon Plant-louse.
  - Deilephila lineata, White-lined Sphinx.
- Weeds.
  - Acridium americanum, American Locust.
      - var. ambiguum, American Locust, Yellow var.
    - emarginatum, Emarginate Locust.
  - Agrotis saucia, Variegated Cutworm.
    - subgothica, Dingy Cutworm.
    - tessellata, Striped Cutworm.
  - Anomala binotata, Two-spotted Vinechafer.
  - Blissus leucopterus, Chinch bug.
  - Caloptenus bivittatus, Striped Caloptenus.
    - differentialis, Lubberly Caloptenus.
  - Gortyna nitela, Stalk Borer.
  - Leucarctia acræa, Salt-marsh Caterpillar.
  - Œdipoda carolina, Carolina Locust.
  - Philometra serraticornis.
  - Tragocephala, Goathead Locusts.
    - viridifasciata, var. infuscata, Dusky Locust.
      - var. virginianana, Green-striped Locust.
- Wheat.
  - Acridium americanum, American Locust.
  - Agriotes mancus, Wheat Wire worm.
    - saucia, Variegated Cutworm.
  - Blissus leucoptenus Chinch bug.
  - Caloptenus femur-rubrum, Red-legged Locust.
    - spretus, Rocky Mountain Locust.
  - Cecidomyia destructor, Hessian Fly.
  - Diplosis tritici, Wheat Midge.
  - Elateridæ, Wire-worms.
  - Gelechia cerealella, Angoumois Grain Moth.
  - Gortyna nitela, Stalk Borer.
  - Heliophila harveyi, Wheat-head Army-worm.
  - Isosoma elymi, Wheat-straw Worm.
    - hordei, Joint Worm.
  - Lachnosterna fusca, White Grub of Dark May-beetle.
  - Laphygma frugiperda, Fall Army-worm.
  - Leucania unipuncta, Army worm.
- Wheat.
  - Prodenia commelinæ, Wheat Cutworm.
  - Siphonophora avenæ, Grain Plant-louse.
  - Tinea granella, Wolf Moth.
- Wheat, Winter.
  - Blissus leucopterus, Chinch bug.
- Wild Liquorice, Galium circæzans.
  - Aphis circæzandis.
- Wild Rye. (See Grass, Lyme-.)
- Willow.
  - Actias luna, Luna Silkworm.
  - Ægeria anthracipennis.
  - Apatela oblinita, Smeared Dagger.
  - Attacus cecropia, Cecropia Silkworm.
  - Batrachedra salici-pomonella.
  - Cimbex laportei.
  - Chaitophorus salicicola.
    - viminalis.
  - Dolerus arvensis.
  - Ecpantheria scribnia, Large Black Bear.
  - Gelechia gallægenitella.
  - Grapta faunus,
    - j-album.
  - Halesidota caryæ.
  - Hyperchiria io, Io Moth.
  - Hyphantria textor, Fall Web-worm.
  - Lachnus salicelis.
    - salicicola, Plant-louse of the Willow.
  - Limenitis arthemis.
    - disippus, Disippus Butterfly.
    - ursula, Ursula Butterfly.
  - Lucanus dama, Pinching Bug.
  - Nematus salicis-pisum.
    - salicis-pomum.
    - ventralis.
  - Nymphalis disippus, Disippus Butterfly.
  - Oryssus affinis.
    - hæmorrhoidalis.
    - manurus.
  - Saturnia maia, Buck Moth.
  - Siphonophora salicicola, Willow Aphis.
  - Telea polyphemus, Polyphemus Silkworm.
  - Thecla acadica.
  - Vanessa antiopa, Antiopa Butterfly.
- Willow, Black.
  - Aspidiotus salicis-nigræ, Black-willow Bark-louse.
  - Rhopalosiphum salicis.
- Willow, Gray.
  - Lachnus dentatus, Spotted Willow Aphis.
  - Mytilaspis salicis, Willow Bark-louse.
- Willow, Heart-leaved.
  - Euura salicis-ovum.
  - Phytoptus salicicola.
  - Phytoptus sp.
- Willow, Low-bush, Salix humilis.
  - Euura orbitalis.
    - salicis-gemma.
- Willow, Shining.
  - Chaitophorus viminalis.
  - Rhopalosiphum salicis.

Willow, Weeping.
  Chaitophorus viminalis.
  Nematus trilineatus.
  Rhopalosiphum salicis.
Willow, White.
  Chaitophorus smithiæ.
  Euura salicicola.
  Nematus ventralis.
Willow-herb, Epilobium.
  Eudryas grata, Beautiful Wood-nymph.
Willow-herb, Epilobium angustifolium.
  Daremma undulosa.
  Deilephila chamænerii.
Willow-herb, Epilobium coloratum.
  Eudryas unio, Pearly Wood-nymph.
Winterberry, Ilex.
  Cœlodasys unicornis, Unicorn Apple-tree Caterpillar.
Wintergreen.
  Cœlodasys unicornis, Unicorn Apple-tree Caterpillar.
Witch-hazel.
  Hormaphis spinosus.
Wormwood, Artemisia absinthium.
  Siphonophora absinthii.

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